

EXPERT REPORT OF WILLIAM T. BIELBY

Equal Employment Opportunity Commission . v. Wal-Mart Stores, Inc.

March 1, 2007

Assignment, Qualifications, and Materials Reviewed

1. The Equal Employment Opportunity Commission ("EEOC") has retained me as an expert in litigation initiated against Wal-Mart Stores, Inc. ("Wal-Mart"). The EEOC alleges that Wal-Mart engaged in sex discrimination in hiring at its Distribution Center 6097 in London, Kentucky ("6097"). I have been asked by the EEOC to determine whether findings from social science research in which I have expertise explain the pattern of disparities by gender in hiring for entry-level jobs at 6097. I have been asked to review the findings of Dr. Burt Barnow, the statistician retained by the EEOC, and to review documents produced by Wal-Mart and deposition testimony by managers and supervisors regarding the policies and practices used to hire applicants for entry-level jobs at 6097.

2. I have testified as an expert witness in both California Superior Court and Federal Court on cases involving workplace discrimination.¹ A list of cases in which I have been identified as an expert or have given expert testimony since 2002 is attached as Exhibit A. My rate of pay for consultation as an expert in this matter is \$400 per hour.

3. I received a Ph.D. in Sociology from the University of Wisconsin--Madison in 1976. I also have a B.S. in Electrical Engineering and a M.A. in Social Sciences from the

¹I have submitted expert reports in two other cases involving Wal-Mart. One is *Betty Dukes, et al. v. Wal-Mart Stores, Inc.*, in which the central allegations concern gender bias in pay and promotion in store-level jobs, and *Daryal Nelson, et al. v. Wal-Mart Stores, Inc. and Wal-Mart Transportation LLC*, in which plaintiffs' allege racial discrimination in hiring of over-the-road truck drivers in the company's logistics division.

University of Illinois. I am Professor of Sociology at the University of Pennsylvania, where I am also affiliated with the Population Studies Center. Prior to that, I served for twenty-seven years as a faculty member in the Department of Sociology at the University of California, Santa Barbara ("UCSB"), where I chaired my department from 1992 to 1998. At UCSB I was also affiliated with the Department of Statistics and Applied Probability.

4. I have taught courses on employment discrimination at both the undergraduate and graduate levels at UCSB, at the University of California Washington Center in the District of Columbia, and at Northwestern University. Among my former positions are Visiting Professor of Management at UCLA, Fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford, Visiting Distinguished John D. MacArthur Professor of Sociology at Northwestern University, and Visiting Scholar at the American Bar Foundation. Since joining the faculty of the University of Pennsylvania I have taught graduate level courses on statistics and research methods in the social sciences. In addition to courses on discrimination, research methods, and statistics, I have taught graduate and undergraduate courses on organizational behavior, labor markets, and social inequality. I also specialize in research in each of these areas. Over the past twenty years, much of my research has focused on issues of workplace discrimination and on organizational policies and practices more generally. My research on these topics has been supported by four grants from the National Science Foundation, and it has been published in leading peer-reviewed social science research journals. My Curriculum Vitae is attached as Exhibit B.

5. I have received national awards from three different professional associations for my research on gender, labor markets, social psychological aspects of work, and organizational personnel practices. I have served on numerous panels, advisory committees, and professional workshops on topics relating to workplace discrimination, organizational personnel policies and practices, and research methodology. I have served as an advisor, consultant, or reviewer for the following organizations and agencies: the U.S. Bureau of the Census, the U.S. Department of Justice, the U.S. Department of Labor, the Equal Employment Opportunity Commission, the National Science Foundation, the National Institute of Mental Health, the National Academy of Sciences, the University of Michigan's Institute for Social Research, Stanford University, the Writers' Guild of America, West and the Bar Association of San Francisco. I have also served on the editorial boards of leading social science journals, and I regularly review manuscripts for scientific journals on topics relating to organizational behavior, employment discrimination, and research methodology. I have been elected to several offices in the American Sociological Association. I served for three years on the ASA Council, the organization's governing body in addition to serving as the Association's President in 2003.

6. I have reviewed the deposition testimony of individuals who have held management positions at 6097 and have either overseen or participated in hiring decisions: They are (in alphabetical order) general manager Jeff Akers; Janet Baker, who has held a variety of positions at 6097, including perishable receiving manager, payroll clerk, and loss prevention supervisor; Vince Biondo, formerly a general manager at 6097 and a regional vice president at the time of his deposition; Ralph Earls, formerly an

operations manager and warehouse manager at 6097 and at the time of his deposition a general manager in Olney, Illinois; Michael Giles, a personnel manager at the time of his deposition and formerly a warehouse manager and operations manager at 6097; Jim Gulock, an area manager at 6097 at the time of his deposition; Lee Holland, who was an area manager, operations manager, and warehouse manager at 6097 from 1998 to 1999; Oscar Miller, a maintenance operations manager at 6097 at the time of his deposition; and Jim Reeves, who was a personnel manager at 6097 from approximately 1998 to 2002.

7. A list of documents I have reviewed appears in Appendix C.

8. I have also relied upon academic articles, chapters, and books written by social scientists and management scholars, and they are cited in the footnotes to this report. Social research conducted across many decades has generated considerable knowledge about what generates and sustains workplace inequalities. That same research, either directly or by implication, points to the kinds of workplace policies and practices that are likely to minimize bias. The relevant research has applied multiple methodologies in a variety of contexts, including experiments in controlled laboratory settings; ethnographies and case studies in "real world" organizations both large and small, public and private, and in a range of industries; surveys done with representative samples of workers and employers; and historical studies based on archival materials from the United States and abroad. Thus, the scientific evidence about bias, discrimination, and the structure and dynamics of race in organizations that I rely upon has substantial external validity and provides a sound basis for analyzing Wal-Mart's policies and practices. My method is to look at distinctive features of the organization's policies and practices and to evaluate

them against what social science research shows to be factors that create and sustain bias and those that minimize bias. In litigation contexts, this method of analysis is known as "social framework analysis."²

Trends in Gender Disparities at the London, Kentucky Distribution Center

9. In my report, I focus on gender disparities in hiring for entry-level jobs from among the pool of those who applied for jobs at 6097. I have not done an analysis of factors contributing to gender differences in the rate at which men and women apply to work at 6097. Also, I have not done an analysis of Wal-Mart's policies and practices for making decisions about transfers into positions at 6097. It is my understanding that Dr. Barnow's statistics include transfers. It is also my understanding that transfers account for very few of the hiring decisions included in Dr. Barnow's analysis, and therefore it is reasonable to assume that the size of the gender disparities and their pattern over time would be substantially similar if transfers were excluded from the analysis. I have reviewed Dr. Barnow's results showing that from 1998 through 2001 there are large and statistically significant disparities gender in the rate at which male and female applicants are approved for job offers. His results show that in each year over that period, the percentage of male applicants who receive offers is several times as large as the percentage of female applicants who receive offers. His results also show that from 2002 forward the gender disparity is much smaller than in the earlier period. I have reproduced Exhibit 3 of Dr. Barnow's report as Figure 1 in this report.

²See E. Borgida, C. Hunt, and A. Kim, "Research in Sex Discrimination Litigation," *Journal of Law and Policy*, Vol. 13, 2005, p. 613-628; D. L. Faigman and J. Monahan, "Psychological Evidence at the Dawn of the Law's Scientific Age," *Annual Review of Psychology*, Vol. 56, 2005, p. 631-659; J. Monahan and L. Walker, *Social Science in Law: Cases and Materials*, Fourth Edition, Foundation Press, 1998, Chapter Five, "Social Science Used to Provide Context."

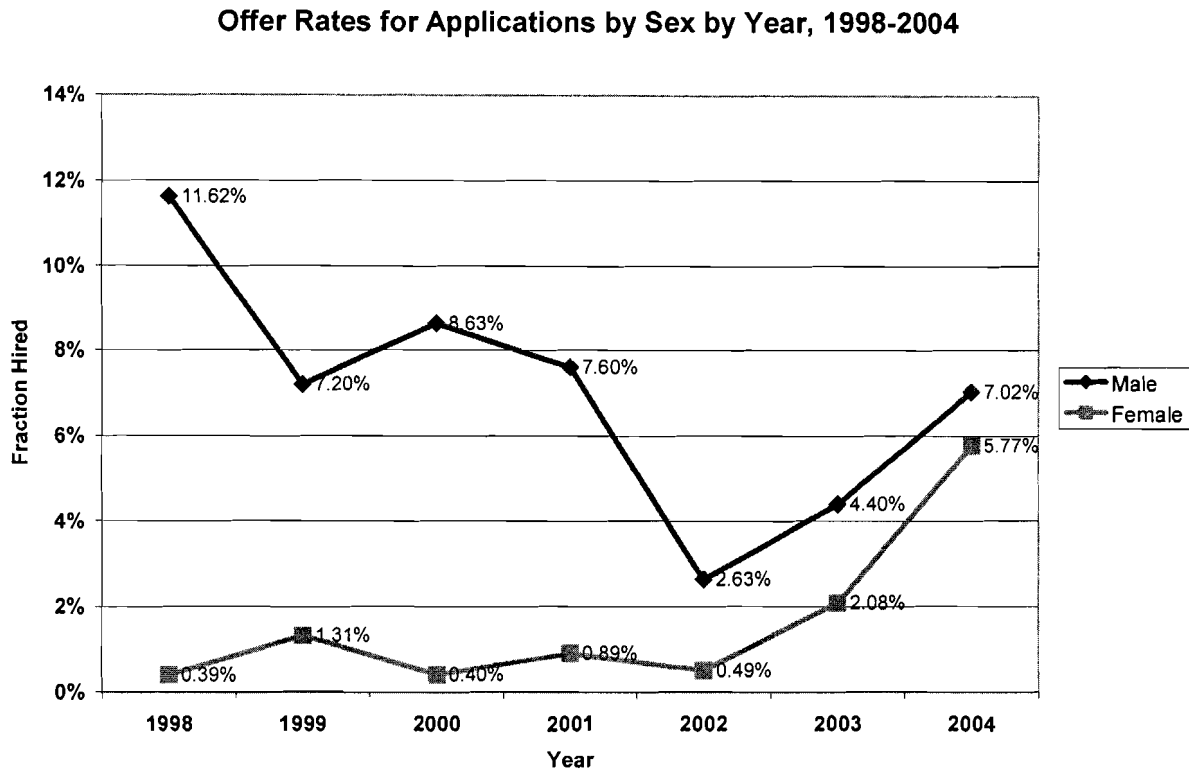


Figure 1. Based on Exhibit 3 of Dr. Barnow's Report

10. What explains the fact that the gender disparity in offer rates declines after 2001? Nothing in the record I have reviewed suggests that the relative strength of qualifications of male versus female applicants changed substantially over time, with women's qualifications increasing relative to those of men after 2001. A more likely explanation is that that policies and practices for making hiring decisions at 6097 changed after 2001, and that features of those policies and practices that disadvantaged women were less prevalent or less consequential in the later period.

The Gender Composition of the Workforce at 6097 and the Entry-Level Order Filler Position

11. The gender composition of the workforce at the London Kentucky facility is overwhelmingly male. For example, the 2002 Equal Employment Opportunity Report for 6097 ("EEO-1 Report") shows that men comprised 92.6% of the workforce of 744 employees, and 98.6% of the 561 employees categorized as laborers, which includes the entry-level position of order filler.³

12. Of course, these statistics reflect the rates at which men and women apply for and are hired for positions at 6097 (as well as the rate at which they leave those positions). However, the gender composition of a job is also an important part of the *organizational context*, which in turn shapes how the company's hiring policies and practices impact women. Social science research shows that occupations and jobs with highly skewed ratios of men to women become *sex labeled* -- widely viewed as "men's work" (if males predominate) or "women's work" (if women predominate). This is especially true when jobs are viewed as having *sex-linked characteristics* -- that is, when the preferred employees for the line of work have traits that are considered prevalent among the members of one sex.⁴ Physically demanding work is one example of the kind of trait that contributes to the sex labeling of a job.⁵ Sex-labeled jobs within organizations also sustain and reinforce *gender-based schema* -- cognitive representations (stereotypes) that shape how decision-makers understand the traits of job

³Equal Employment Opportunity 2002 Employer Information Report, WMDP01079. In 2005, the most recent EEO data I have seen, men comprised 91.1% of the workforce at 6097 and 96.5% of laborers (2005 Employer Information Report, WMDP01082).

⁴V. K. Oppenheimer, "The Sex-Labeling of Jobs," *Industrial Relations*, Vol. 7, 1968, p. 219-234, esp. p. 226-228; also see S. Kiesler, "Actuarial Prejudice Towards Women and Its Implications," *Journal of Applied Social Psychology*, Vol. 5, 1975, p. 201-216.

⁵Oppenheimer, *op cit.*, p. 226; W. T. Bielby and J. N. Baron, "Men and Women at Work: Sex Segregation and Statistical Discrimination," *American Journal of Sociology*, Vol. 91, 1986, p. 759-99, esp. 782-785.

incumbents.⁶ Management scholar Elissa Perry and colleagues summarize this line of social science research as follows:

The reinforcing effects of context on decision makers' jobholder schemas are one important reason for the persistence of gender segregation. A second reason why gender segregation persists is that gender-associated jobholder schemas may reinforce contextual factors that generate segregation. For example, if a job's current gender composition is skewed, then gender becomes part of decision makers' schema (through the process of repeated observation). Consequently, when decision makers use these gender-associated schemas in hiring and promotion decisions, the current gender composition of the job is recreated.... Thus, context and cognition may operate in a mutually reinforcing fashion to sustain gender segregation.⁷

Most studies consider a job or occupation in which men (or women) comprise a majority of 85% or more to be a line of work that is likely to be male-dominated (or female-dominated) and gender labeled and one in which the gender composition of the job is reinforced by and reinforces gender schemas.⁸

13. The London, Kentucky distribution center has an overwhelmingly male-dominated workforce, and it is perceived as such by those who work there.⁹ In addition, physical demands are a salient feature of the entry-level, male-dominated job of order

⁶E. H. Gorman, "Gender Stereotypes, Same-Gender Preferences, and Organizational Variation in the Hiring of Women: Evidence from Law Firms," *American Sociological Review*, Vol. 70, 2005, p. 702-728, esp. p. 704-705; P. DiMaggio, "Culture and Cognition," *Annual Review of Sociology*, Vol. 23, 1997, p. 263-287; M. E. Heilman, "Sex Bias in Work Settings: The Lack of Fit Model," *Research in Organizational Behavior*, Vol. 5, 1983, p. 269-298, esp. p. 263-271, 273-274.

⁷Perry *et al.*, *op cit.*, p. 820. Also see M. E. Heilman, "The Impact of Situational Factors on Personnel Decisions Concerning Women: Varying the Sex Composition of the Applicant Pool," *Organizational Behavior and Human Decision Processes*, Vol. 26, 1980, p. 386-395; and M. E. Heilman, R. F. Martell, and M. C. Simon, "The Vagaries of Sex Bias: Conditions Regulating the Undervaluation, Equivaluation, and Overvaluation of Female Job Applicants," *Organizational Behavior and Human Decision Processes*, Vol. 41, 1988, p. 98-110.

⁸Oppenheimer's criteria was 70%. Most organizational sociologists follow Kanter's definition of 85% as the threshold for a skewed distribution (R. M. Kanter, *Men and Women of the Corporation*, Basic Books, 1977). See, for example, D. F. Izraeli, "Sex Effects or Structural Effects? An Empirical Test of Kanter's Theory of Proportions," *Social Forces*, Vol. 62, 1983, p. 153-165; and J. Pfeffer and A. Davis-Blake, "The Effect of Proportion Women on Salaries: The Case of College Administrators," *Administrative Science Quarterly*, Vol. 32, 1987, p. 1-24. Also see E. L. Perry, A. Davis-Blake, and C. T. Kulik, "Explaining Gender-Based Selection Decisions: A Synthesis of Contextual and Cognitive Approaches," *Academy of Management Review*, Vol. 19, 1994, p. 786-820, esp. p. 798-799.

⁹Earls depo., p. 117-228; Reynolds depo., p. 96-97; Biondo depo., p. 31.

filler. Thus, it meets the criteria for a sex-labeled job, and as a result gender schema are likely to have an influence on hiring decisions. This is likely to be the case over the entire period from 1998 through 2004,¹⁰ but the impact is likely to be greater during the period prior to 2002. As I explain below, from 1998 through 2001 written criteria for making decisions about hiring were vague, decision-makers were granted considerable discretion over how to make judgments about applicants for entry-level jobs and given few guidelines for exercising that discretion, there was little monitoring or oversight over the process and criteria used to make decisions about hiring, and attentiveness to equal employment opportunity existed only at the most general level. Some of these factors which contribute to gender bias were less prevalent in the years since 2001.

How Discretionary Decision-Making Contributes to Gender Bias

14. Social science research demonstrates that substantial discretion in assessing and weighing evaluative criteria invites bias. In a highly discretionary system with limited monitoring, even objective factors can be evaluated in a way that leads towards favoritism to the majority group and discrimination against those in the minority. For example, social psychologists Samuel Gaertner and John Dovidio have conducted research showing that when white evaluators have discretion in how to weigh evaluative criteria, they tend to do so selectively, in a way that biases outcomes in favor of white rates. In one part of their study, participants were told they were assisting a university in making admission decisions, and they were given information on factors such as test scores and high school grades for (hypothetical) African American and white applicants. When applicants were strong on one dimension and weak on the other, raters tended to

¹⁰It is my understanding that data for 2005 and 2006 have not yet been produced. Therefore, I have no access to information that would indicate whether the reduction in gender disparities that began in 2002 continued beyond 2004.

give the stronger dimension a greater weight for white applicants and the weaker one a greater weight for African American applicants.¹¹ In other words, they exercised their discretion in a way that ensured that whites would rank on top. The authors summarize their findings as follows:

White college participants (whom, relative to the general population may be regarded as generally moderate to low prejudiced...), give White candidates the "benefit of the doubt," a benefit they do not extend to Blacks.¹²

15. In a study of gender bias with a similar experimental design, Eric Uhlmann and Geoffrey Cohen found that when given discretion on defining and weighing qualifications, evaluators redefined criteria of success so that men were assigned to stereotypically male jobs and females were assigned to stereotypically female jobs.¹³ They concluded (p. 474) that "even without ambiguity in applicants' credentials, the criteria used to assess merit can be defined flexibly in a manner congenial to the idiosyncratic strengths of applicants who belong to desired groups." By acting in this way, decision-makers can justify biased decisions by appealing to seemingly "objective" criteria. In their words (p. 479):

Bias in the construction of job criteria allows evaluators both to discriminate and to maintain a personal illusion of objectivity. Although gender stereotypes encourage discrimination, egalitarian norms compel making hiring decisions on the basis of applicants' merit rather than their group membership. These

¹¹G. Hodson, G., J. F. Dovidio and S. L. Gaertner, "Processes in Racial Discrimination: Differential Weighting of Conflicting Information," *Personality and Social Psychology Bulletin*, Vol. 28, 2002, p. 460-471.

¹²S. L. Gaertner, J. F. Dovidio, J. Nier, G. Hodson, and M. A. Houlette, "Aversive Racism: Bias Without Intention," p. 377-393 in *Handbook on Employment Discrimination Research: Rights and Realities*, edited by R. L. Nelson and L. B. Neilson, Kluwar Academic Press, 2005 (internal citation omitted, quotation on p. 384); G. Hodson, J. F. Dovidio, and S. L. Gaertner, "Processes in Racial Discrimination: Differential Weighting of Conflicting Information," *Personality and Social Psychology Bulletin*, Vol. 28, 2002, p. 460-471.

¹³E. L. Uhlmann and G. L. Cohen, "Constructed Criteria: Redefining Merit to Justify Discrimination," *Psychological Science*, Vol. 16, 2005, p. 474-480.

conflicting pressures can be reconciled by defining and redefining merit in a manner that justifies discrimination.¹⁴

Uhlmann and Cohen conclude their study by linking it to the research of Gaertner and Dovidio described above, noting (p. 479) that it "dovetails with work on aversive racism in suggesting that prejudice often expresses itself in rationalizable ways..." In sum, this body of research demonstrates that discretion in the definition and weighing of evaluative criteria, even with regard to ostensibly objective criteria, contributes to bias, and it often does so in a way that allows decision-makers to justify to themselves and to others that their actions are fair and nondiscriminatory.

16. Bias due to discretionary decision-making of the type described above comes about largely because of the influence of gender stereotypes. Gender stereotypes are "socially shared beliefs about the characteristics or attributes of men and women in general that influence our perceptions of individual men and women."¹⁵ Industrial psychologist Jeanette Cleveland and coauthors summarize research on the pervasiveness of gender stereotypes as follows:

Pervasiveness of Gender Stereotypes. Assessments of gender stereotypes in the United States have shown remarkably consistent results. Again, women are often described as affectionate, attractive, charming, dreamy, emotional, flirtatious, and sentimental. Men are often described as aggressive, assertive, dominant, handsome, masculine, strong, tough, rational, and realistic. This research has been extended to 25 countries to assess sex-trait stereotypes cross-culturally (Best & Williams, 1990). In all 25 countries surveyed, women were described as sentimental, submissive, and superstitious, and in 22 countries they were described as sexy. For men in all 25 countries, masculine stereotypes included adventurous, independent, masculine, and strong. *This consistent pattern of findings across studies and across countries suggests that gender stereotypes are quite pervasive [emphasis added].*¹⁶

¹⁴Also see M. I. Norton, J. A. Vandello, and J. M. Darley, "Casuistry and Social Category Bias," *Journal of Personality and Social Psychology*, Vol. 87, 2004, p. 817-831.

¹⁵J. N. Cleveland, M. Stockdale, and K. R. Murphy, *Women and Men In Organizations: Sex and Gender Issues at Work*, Lawrence Erlbaum Associates, 2000, p. 42-43.

¹⁶J. N. Cleveland, *et al.*, *op cit.*, p. 47.

Again, given the male-dominated work context at Wal-Mart's London, Kentucky facility, it is reasonable to assume the pervasiveness of gender stereotypes detected in social science research conducted worldwide is present in that setting as well.¹⁷

17. It is sometimes claimed that gender stereotypes do not influence personnel decisions when the company's culture encourages managers to pay attention to information about individual employees.¹⁸ Such claims usually cite research studies on the role that "individuating information" plays in reducing stereotyping. In fact, the relevant social science research demonstrates conclusively that it is only under very specific circumstances that individuating information reduces the impact of stereotyping. Dr. Eugene Borgida, a leading social psychologist who specializes in research on stereotyping, summarizes this research in an article, "Gender Stereotyping: Scientific Status," which appeared in the book *Modern Scientific Evidence: The Law and Science of Expert Testimony*.¹⁹ Regarding the current status of research on the topic, Dr. Borgida and his coauthors wrote (p. 408):

"Early studies suggested that knowledge of individuating information could reduce or even eliminate the influence of gender stereotypes on judgments about the individual. These studies have been misinterpreted as evidence that perceivers will not use stereotypes as long as they have any form of individuating information about a person. *However, additional research and theory indicate*

¹⁷Ralph Earls articulated gender stereotypes when he testified that one of the steps he took to enhance gender diversity at 6097 because "when you're running receiving operations, I personally feel like that they do a better job counting, taking care of all the technical work than men do" (Earls depo., p. 135). Mr. Earls also testified (p. 129-30) that he believed there was a stronger pool of male applicants than female applicants because women were staying home with the kids while men were out working two jobs.

¹⁸For example, see D. Copus, "A Lawyer's View: Avoiding Junk Science," p. 450-462 in *Employment Discrimination Litigation: Behavioral, Quantitative, and Legal Perspectives*, edited by F. J. Landy, Jossey Bass, 2005.

¹⁹J. S. Hunt, E. Borgida, K. M. Kelley, and D. Burgess, "Gender Stereotyping: Scientific Status," p. 384-426 in *Modern Scientific Evidence: The Law and Science of Expert Testimony*, edited by D. Faigman, D. H. Kaye, M. J. Sacks, and J. Sanders, West Publishing Co., 2002.

that the effects of individuating information are considerably more complex [emphasis added].²⁰

The article goes on to explain that individuating information on an individual's characteristics is considered only if it is inconsistent with the stereotype, and event then, the information about the individual is sometimes processed in a biased manner.

Elaborating on this, Dr. Borgida and coauthors wrote (p. 409):

"Without necessarily realizing it, perceivers tend to selectively process information about individuals that is consistent with group stereotypes, while inhibiting information that is inconsistent with stereotypes. Perceives also use stereotypes when they interpret individuating information.... Thus, people tend to interpret ambiguous or internally contradictory (i.e. mixed) individuating information in stereotype-consistent ways. Only individuating information that is truly unambiguous is seen as stereotype-disconfirming. This process of biased information-processing is particularly insidious because people believe they are judging others on the basis of personal characteristics, often unaware of the influence that stereotypes have on the interpretation of those characteristics."

Dr. Borgida and his coauthors go on to summarize research that "non-diagnostic" or irrelevant information about an individual (e.g. information about personal qualities not related to job-related qualifications for a promotion), can, under some circumstances, actually increase the impact of stereotyping.²¹

18. Dr. Borgida and his coauthors conclude their discussion of individuating information by noting that "the relationship between knowledge of individuating information and stereotype use is complex, depending on elements of the target, the perceiver, the individuating information, the relationship between the information and the group stereotype, and the particular decision being made" (p. 410).

19. Later in the chapter, Dr. Borgida and his coauthors summarize research on "intentional stereotype suppression," that is, "the ability of individuals to control their

²⁰Not included in the quotes extracted here are the extensive footnotes to the relevant scientific literature.

²¹Hunt *et al.*, p. 410. They use the example of a decision-maker learning that a woman was on a pep squad, when making a decision for which that particular piece of individuating information is not directly relevant.

own use of gender (and other) stereotypes." This research demonstrates that it is incorrect to assume that simply enunciating a principle like "respect for the individual" and reinforcing it in the company culture is sufficient to motivate individuals not to be influenced by stereotypes.. The relevant scientific research summarized by Dr. Borgida and coauthors demonstrates that this assumption is incorrect (p. 418):

"Research suggests that the intentional stereotype suppression is a difficult process that can occur only under certain circumstances. Further, recent research has documented a rebound effect, in which stereotype use actually increases when a person ceases active efforts to inhibit stereotypes."

The article notes that effective stereotype suppression requires "careful, deliberative thought" which in turn requires sufficient motivation to be free of bias (p. 418-419). As with the use of irrelevant individuating information, attempts to suppress stereotyping can lead to subsequent "rebound effects" which increase rather than decrease the use of stereotyping. Dr. Borgida and his colleagues draw the following conclusion from their review of the relevant research (p. 419):

"Moreover, even when stereotype suppression initially is successful, a backlash can occur, actually increasing the use of stereotypes after active inhibition efforts end. *This research therefore suggests that controlling the use of gender stereotypes in busy workplace environments may be very difficult, indeed [emphasis added].*"

It is for precisely this reason that having a stated value of "respect for the individual" is not sufficient to reduce the impact of stereotyping on personnel decisions and why clearly specified and relevant criteria, along with effective monitoring and accountability are necessary to minimize the impact of stereotypes and gender bias on personnel decisions.²²

²²W. T. Bielby, "Minimizing Workplace Gender and Racial Bias," *Contemporary Sociology*, Vol. 29, 2000, p. 120-129.

20. Below, I first describe the policies and practices for making hiring decisions at 6097 in recent years and in the period from 1998 through 2001. Then I describe distinctive features of those policies and practices in the earlier period that are likely to have disadvantaged women and features in the later period that are likely to have reduced those disadvantages.

The Hiring Process at 6097

21. In interrogatory responses, Wal-Mart described the process for hiring new Associates that was introduced in 2002 at Distribution Center 6097 as follows:

1. Hourly personnel associate conducts telephone screening interview.
2. Two salaried managers conduct a "panel interview" and complete the "panel interview" form.
3. Hourly personnel associate conducts telephone reference check(s).
4. The Distribution Center general manager, Assistant general manager, or personnel manager review the interview packet.
5. Two salaried managers conduct a "final interview" and complete the "final interview" form.
6. If the applicant interviewed has not received a rating of "very strong evidence skill not present," "strong evidence skill not present," or "insufficient evidence for or against skill," the highest-ranking interviewer conducting the final interview makes a conditional offer of employment to the applicant.²³

This process, referred to by the company as "behavioral interviewing," was implemented in 2002 "as part of a Division-wide initiative to reduce turnover and implement a more uniform and consistent hiring process." The process was modified again in September,

²³Defendant's Answer to EEOC's Third Set of Interrogatories, May 1, 2006, p. 3-5; Gulock depo., p. 55-61.

2003, after which interviewing was to be done by a "core group" of interviews in order to "provide consistency among core group of interviewers, to streamline the interview process, and to facilitate management oversight." In December, 2004 a single interviewer replaced the panel in the both the panel and final interview in order to "improve efficiency of hiring process among 'core group' of interviewers." At the same time, salaried managers began doing the telephone screening interviews, instead of hourly associates.²⁴

22. The process in place prior to 2002, as described in the company's interrogatory responses, documents, and deposition testimony included pre-screening of applications followed by three interviews: an initial interview by an area manager; a second interview by an operations manager; and a third interview by a warehouse manager, who would make a tentative offer pending the result of a drug screen. The Orion Pre-Employment Audit survey was administered after the first interview, and applicants were given a job matrix that listed job duties at the time of the second or third interview. Some applicants would also be given and a tour of the facility in order to get an opportunity to observe the jobs being filled. The reference check was similar to that described above for the process introduced in 2002.²⁵

²⁴Defendant's Answer to EEOC's Third Set of Interrogatories, May 1, 2006, p. 5-6.

²⁵Defendant's Answer to Plaintiff's First Propounding of Interrogatories and Requests for Production of Documents, September 15, 2002, p. 4; Hiring Hourly Associates, Divisional (07), DC-20-3, July, 1997 (WMDP00001-00012); Hiring Hourly Associates, Divisional (07), DC-20-3, March, 1999 (WMDP00033-00046); Akers depo., p. 36, 109-111; Biondo depo., p. 55-56, 103-104; Earls depo., p. 14-15, 22-23, 26, 41, 169, 173-175; Giles depo., p. 48; Reeves depo., p. 14-16, 30-31; Reynolds depo., p. 40, 72-73, 76-77; Holland depo., p. 18-21, 27-28. Mr. Earls, who was a receiving operations manager at the London distribution center for six months in 1995 and a warehouse manager from 1998 to 2000 testified that no particular manager was responsible for hiring order fillers, but instead any coach or assistant coach could be involved in the interview process (Earls depo., p. 52-53). Mr. Biondo, who was general manager of the distribution center from approximately 1995 to 2000 testified that some but not all applicants were given a walk-through of the facility, but he agreed that the practice was "hit-or-miss," depending on the interviewer and the time available (Biondo depo., p. 55-56).

Factors Contributing to Gender Disparities Prior to 2002

23. Discretion in the criteria used to make decisions about hiring, a lack of guidelines, and limited oversight over the hiring process is apparent in the deposition testimony of individuals who participated in hiring interviews at 6097 prior to 2002. Even job qualifications that are based on seemingly objective criteria are evaluated in highly discretionary ways. For example, one of the few written criteria for making hiring decisions, used in the pre-screening phase, relates to job history. Screeners are instructed to look at "frequent job changes and reasons for change" and to "look for gaps in employment."²⁶ Regarding how to assess reasons for changes in employment, Jim Reeves, the personnel manager who presided over the hiring process at 6097 from approximately late 1998 to 2002 testified as follows:

6 Q. And the reasons for the changes, that's
7 the second part of that Factor D. Did you have any
8 guidelines with respect to reasons for changes that
9 would screen a person out?
10 A. Not any written guidelines. Something
11 that makes good sense, I guess.
12 What I look for, if the person was laid off, or
13 if they were a student and working temporary jobs,
14 and that sort of thing.
15 Q. There is no Wal-Mart policy that you know
16 of that lists "X" number of reasons for changes that
17 would screen a person out?
18 A. Not that I'm aware of.
19 Q. And you, yourself, while you were at
20 6097, didn't establish any of those guidelines?
21 A. No.
22 Q. So, again, that's one of those things
23 that's subjective. It was left up to whomever it
24 was that was doing the screening?
25 A. Well -- yeah.²⁷

Mr. Reeves gave similar testimony regarding the lack of guidelines for screening on gaps in employment.²⁸

²⁶Hiring Hourly Associates, Divisional (07), DC-20-3, July, 1997 (WMDP00003); Hiring Hourly Associates, Divisional (07), DC-20-3, March, 1999 (WMDP00035).

²⁷Reeves depo., p. 39. Mr. Reeves also testified (p. 41) that he could not recall any written policies, memos, or other guideline specifying what screeners should look for regarding reasons for job changes.

24. Beyond the pre-screening stage, most managers who participated in interviews testified that they looked at an applicant's job history, how frequently they changed jobs, and whether there were gaps in employment as well,²⁹ but there was little consistency in how these factors were assessed and weighed in making a decision about whether to approve the applicant to move forward in the hiring process. For example, regarding how he evaluated how long a person held a job in making decisions about rejecting or approving an applicant, Jim Gulock testified as follows:

18 Q. I'm asking you what -- does how long a
19 person's held a job, what does that mean in the
20 consideration of whether somebody gets passed on. Yeah,
21 if there's a number, that's -- let me know.
22 A. It's just each application is different,
23 and we look at each application based on the amount of
24 jobs they've had, is one of the things that is looked at
25 versus how many -- how long they held down those jobs.

1 To me there's -- there's not a number out there. You're
2 just trying to get a feel of that individual, of what
3 kind of job history they have.³⁰

and:

21 Q. Okay. The other thing I hear you're
22 telling me, though, is that there is no particular
23 standardization or guidelines with respect to how you
24 measure any of those things; for example, how long a
25 person has held a job -- one year, five years, ten
1 years -- you can't tell me as you sit here today that
2 any of those particular numbers or any number at all
3 makes a difference in the consideration as to whether or
4 not that person is going to advance in the interview
5 process?
6 A. It could make a difference.
7 Q. It could. But you can't give me a hard
8 number right now because there is none basically is what
9 you're telling me?
10 A. There's not a number that we go by.³¹

Vince Biondo testified that when he was general manager at 6097 he instructed managers to consider stability in an applicant's work history and to avoid applicants who were "job

²⁸Reeves depo., p. 41-42.

²⁹In addition to the deponents quoted below, see Biondo depo., p. 69-70, 73-74; Akers depo., p. 37-40.

³⁰Gulock depo., p. 33-34.

³¹Gulock depo., p. 38-39. Oscar Miller gave almost identical testimony at p. 40-41 of his deposition.

hopping" and therefore would be less likely to stay with the company. But according to Mr. Biondo, he gave his managers no standard against which to measure the stability of an applicant's work history, because, in his opinion, no such standard exists.³² The lack of guidelines for assessing applicant traits that are presumed to predict job turnover and commitment to a career is likely to contribute to gender bias in hiring because of the stereotype that women are less committed to work than are men and, due to family obligations, are more likely to leave the workforce than are men.³³

25. Because the entry-level job of order filler requires frequent lifting of heavy objects,³⁴ it is especially important that applicants' ability is assessed in a reliable and valid manner. Making such assessments in a subjective and discretionary manner will allow gender stereotypes about men's and women's suitability for physically demanding work to influence hiring decisions.³⁵

26. At 6097 there is no systematic assessment or test of applicants' ability to meet the physical demands of the position of order filler and there is no company policy about verifying an individual's ability to do the lifting involved in the job.³⁶ Most managers testified that they looked for evidence of past jobs or other activities that involved heavy physical labor, but the way they evaluated this information was unsystematic and

³²Biondo depo., p. 98-100.

³³Bielby and Baron, *op cit.*; L. H. Chusmir, "Job Commitment and the Organizational Woman," *Academy of Management Review*, Vol. 7, 1982, p. 595-602; P. V. Marsden, A. L. Kalleberg, and C. R. Cook, "Gender Differences in Organizational Commitment: Influences of Work Positions and Family Roles," *Work and Occupations*, Vol. 20, 1993, p. 368-390; S. M. Stewart, M. N. Bing, M. L. Gruys, and M. C. Helford, "Men, Women, and Perceptions of Work Environments, Organizational Commitment, and Turnover Intentions," *Journal of Business and Public Affairs*, forthcoming, 2007 (www.scientificjournals.org/articles/1035.htm).

³⁴Wal-Mart Distribution Centers Matrix of Essential Job Functions: Orderfiller/Processing Caselot/Breakpack (Entry Level) WMWP-27 Revised 11/98, WMDP00062; Gulock depo., p. 76-77; Earls depo., p. 48-49; Biondo depo., p. 21-22; Giles depo., p. 21-23; Reynolds depo., p. 13-14, 125-126.

³⁵Bielby and Baron, *op cit.*; K. Deaux and L. L. Lewis, "Structure of Gender Stereotypes: Interrelationships Among Components and Gender Label," *Journal of Personality and Social Psychology*, Vol. 46, 1984, p. 991-1004.

³⁶Gulock depo., p. 70-71; Earls depo., p. 53-54.

idiosyncratic. Some testified that prior experience in physically demanding manual labor would give a candidate a slight advantage,³⁷ although most testified that the lack of such experience would not disqualify an applicant from advancing in the hiring process.³⁸ But I saw little evidence of managers assessing applicants' ability to fulfill the physical requirements of the job in a systematic manner and considerable evidence of them doing so by making subjective judgments. For example, Mike Giles testified that he might approve an applicant who had never done manual labor if that person volunteered that they were "not afraid" or if he or she had a "good attitude" and was "enthusiastic."³⁹ Questioned by defendant's counsel, Mr. Giles, who is currently a personnel manager, gave the following testimony about how his subjective feelings would affect his decision-making (emphasis added):

20 Q. What do you look at to tell you that
 21 somebody can do that physical manual part of the job?
 22 MS. EDMONDS: Same objection.
 23 A. Do they -- do they look like they can lift a
 24 case.
 25 Q. And what do you base that on? Do you size
 1 somebody up and say I think you can lift a case or do
 2 you look at other things that tells you this person can
 3 lift a case for hours and hours at a time?
 4 A. Well, it's hard to tell if a person can
 5 do -- can lift a case.
 6 Q. Okay. So what do you rely on --
 7 A. My experience.
 8 Q. -- when you're talking to somebody about it?
 9 A. My experience, **the feeling I get talking to**
 10 **them.**⁴⁰

³⁷Jeff Akers, former general manager at 6097 described such experience as a "minor plus" although it would "depend how the interview goes" because there were many other factors to assess (Akers depo., p. 60). Eugene Reynolds also testified that such experience would give a candidate a slight edge (Reynolds depo., p. 26-27, 102).

³⁸See for example Giles depo., p. 44-46; Reynolds depo., p. 102, Miller depo., p. 103.

³⁹Giles depo., p. 44-45. While he would consider approving an applicant who volunteered that he or she was "not afraid," he would not necessarily approve one who expressed a willingness to do any job and was and was confident that he or she could do it (p. 46).

⁴⁰Giles depo., p. 154-155. In addition to this kind of highly subjective assessment, Mr. Giles testified that he would also consider whether prior jobs involved heavy lifting, such as farming, bailing hay, or roofing (Giles depo., p. 155-156).

Ralph Earls had an equally -- if not more -- subjective standard for judging whether an individual with no prior experience in physically demanding jobs was qualified for a position as an order filler, relying in part on his perception of the applicant's nonverbal behavior (emphasis added):

22 Q. Okay. If a person -- let's say you're
23 hiring for an order filler job, and the person says,
24 you know, my past responsibilities were receptionist,
25 filing, office clerk, but, you know, I'm tired of

1 being in an office environment and I want to go and do
2 some physical activity.

3 How does the fact that that person's past
4 job responsibilities hasn't been in the warehouse
5 scenario affect that person's ability to get to the
6 next level of consideration for employment?

7 A. Because he or she hadn't been in order
8 filling or shipping before, had been in clerical, that
9 wouldn't have any bearing on it. You're going to
10 interview that person and **you're going to be looking**
11 **at them, and you're going to say, yeah, I think you**
12 **can do this.** And they are going to tell you whether
13 they think they can do it, after you've explained the
14 job. And then you're going to go forward from there.

15 Q. Let me ask you this. What factors make you
16 say in your head, when you're interviewing somebody,
17 that's a person who I believe can do this job?

18 A. The way they respond, **the way they carry**
19 **themselves when they come in, when they're walking**
20 **with you.**

21 Q. Kind of -- okay. I know there's more and
22 I'll give you the opportunity to tell me that. But
23 let me focus in on what you've just told me.

24 When you say the way they respond, what do
25 you mean?

1 A. **The way they make eye contact with you and**
2 **the way they talk to you, whether they're not nervous**
3 **and they're real comfortable, and they've got a real**
4 **good attitude sitting here talking to you, and that's**
5 **the way -- what I mean by the way they respond.**

6 Q. Okay. When you say the way they act when
7 they walk around with you, what does that mean?

8 A. **Do they keep up with you. When you walk in**
9 **a warehouse, and you're walking pretty fast anyway, do**
10 **they keep up with you or are they five or ten foot**
11 **behind you. Are they not paying any attention to what**
12 **you're saying. Are they interested in staying right**
13 **with you,** and then are they interested in listening to
14 you and asking you questions about what they're
15 seeing.⁴¹

⁴¹Earls depo., p. 167-169.

Like Mr. Earls, Eugene Reynolds relied at least in part on an assessment of applicants' nonverbal behavior to assess whether they had the capacity to handle the physical demands of the job. He testified as follows (emphasis added):

18 Q. Okay. You correct me when I'm wrong,
19 because I don't want to misrepresent your
20 testimony. But what I'm hearing you saying is
21 work history was something that you looked at in
22 order to determine whether somebody was qualified?
23 A. Not totally. I mean, the interviews --
24 when you'd sit through the interviews, you'd want

1 to see, you know, if they're confident in thinking
2 they can do the job, and **you watch them and see**
3 **how they respond to the answers**, or you can tell
4 them how physical the job that they're applying
5 for is and you see if -- if that intimidates them
6 or maybe they don't know how much weight they're
7 going to be lifting. You know, it's all day long.
8 And see how they respond to it. **If they -- you**
9 **know, they have long hesitation** or they're
10 doubtful or are they worried about it or does it
11 bother you.

12 The culture of Wal-Mart, you know,
13 being held accountable for tardies and their
14 attendance and -- you cover things like that and
15 see -- a lot of people can't -- don't like the
16 structural organization like that.⁴²

Subjective judgments of nonverbal behavior can be particularly vulnerable to bias, since an applicant's behavior in the interview can be influenced by the way she or he is treated by the person conducting the interview. This kind of influence is likely in cases where female applicants are being interviewed and then escorted through the facility by men in a male-dominated work setting.⁴³

27. In sum, managers at 6097 have been using a variety of factor to assess whether candidates can perform the physical labor involved in the entry-level position of

⁴²Reynolds depo., p. 25-26.

⁴³See, for example, C. O. Word, M. P. Zanna, and J. Cooper, "The Nonverbal Mediation of Self-Fulfilling Prophecies in Interracial Interaction," *Journal of Experimental Social Psychology*, Vol. 10, 1974, p. 109-120, and the review of this line of research in T. F. Pettigrew and J. Martin, "Shaping the Organizational Context for Black American Inclusion," *Journal of Social Issues*, Vol. 43, 1987, p. 41-78. Also see C. L. Ridgeway and L. Smith-Lovin, "The Gender System and Interaction," *Annual Review of Sociology*, Vol. 25, 1999, p. 191-216.

order filler. They have been doing so in the absence of clear guidelines or written criteria, relying at least in part on highly subjective judgments, and weighing those judgments in a highly discretionary manner.⁴⁴ While it is appropriate to assess applicants' ability to perform the physical aspects of the job, the way it has been done at 6097 is subjective, discretionary, and vulnerable to gender bias, for the reasons described above.

28. Besides assessing applicants' work history and capacity for physically demanding work in a discretionary and subject manner, managers use a variety of other highly subjective factors in making hiring decisions at 6097. Mr. Biondo, the former general manager, testified that in hiring new employees "subjectively, we were looking for happy people, people that were positive, people that appeared to have a high energy level" as well as those who displayed a capacity for teamwork. Asked how he would identify whether an applicant was a happy person, Mr. Biondo acknowledged that it was "very subjective" and that in talking with them about past work, experiences, and accomplishments "you get a feeling by how that person communicates." "Great eye contact" would also be a factor he would weigh in determining whether an applicant was a happy person.⁴⁵ According to Mr. Biondo, a poor showing on these subjective traits could disqualify an applicant from being hired:

3 Q. Would the absence of any one of those subjective
4 things that you just spoke about cause somebody to not be
5 considered for employment?
6 A. You know, yes. If -- if a person was negative, had,
7 you know, problems on their past job with -- with
8 supervision, you know, I would -- it would throw up a red
9 flag, you know, what happened; problems working with other

⁴⁴For example, Oscar Miller, when asked how he would weigh information on whether an applicant had prior experience in warehousing or other physical labor, responded as follows: "Some. I mean, I can't pinpoint it and say if it was a certain percentage, like if it's 50/50 or -- I wouldn't say that..." (Miller depo., p. 104).

⁴⁵Biondo depo., p. 86.

10 people; problems with flexibility. You know, I'm -- I was
11 a -- I was a cashier and they wanted me to be a -- a gas
12 pump attendant at times, and, you know, I wasn't hired to
13 do that. You know, if I heard that, I was discouraged.
14 If we walked them on the floor and showed them the job
15 that they would be doing, you know, did they keep up with
16 you or did they lag behind, you know; did they ask
17 questions? You know, what -- So -- so yes, it could most
18 certainly, those subjective things could force us to make
19 a decision of no, we're not going to hire you.⁴⁶

29. Like Mr. Biondo, Jeff Akers, formerly general manager at 6097, sought "happy" individuals who expressed enthusiasm and presented themselves well. For Mr. Akers, enthusiasm was measured by whether applicants were excited about their jobs, happy, pleasant, and projected themselves well. He would gauge their presentation by how they interacted in the interview and whether they were "vague" or evasive.⁴⁷ Similarly, Michael Giles testified that in addition to evaluating the applicant's work history, in interviews he looked for "attitude" and "enthusiasm."⁴⁸ Like Mr. Biondo, Mr. Earls, and Mr. Reynolds, he attended to applicants' nonverbal behavior during the facility tour, assessing whether they were "uncomfortable" as indicated by whether they "backed off" when equipment came by or were "jumpy" upon hearing a horn beeping on a lift.⁴⁹ Jim Gulock, who also looked for "happy" applicants, testified that in interviewing candidates he would probably assess personality traits such as "team work," "integrity" and "ability to get along," but he would do so only "if it came out in the interview" (i.e., he did not assess these factors systematically in each interview).⁵⁰ In addition to seeking those who were happy and worked well with a group, he also looked favorably upon applicants who were "aggressive but positive" during the interview.⁵¹ Like the others,

⁴⁶Biondo depo., p. 87.

⁴⁷Akers depo., p. 37-41, 47.

⁴⁸Giles depo., p. 16-18.

⁴⁹Giles depo., p. 151.

⁵⁰Gulock depo., p. 29-31, 275.

⁵¹Gulock depo., p. 274-275.

Oscar Miller listed personality traits such as "team player" and "self-motivated" along with work history, but noted that "there's no specific set of guidelines" regarding traits to be assessed in the interview, in part because each interview is different.⁵²

30. In sum, the policy and practice used for hiring into the entry-level order filler position in place at 6097 prior to 2002 was highly discretionary and subjective, with little in the way of written guidelines and managerial oversight and accountability. Even those participating in the process perceived in this way. For example, Michael Giles, formerly a Warehouse Manager at 6097 (and now a personnel manager) testified as follows:

10 Q. Okay. During the time period that you were
 11 warehouse manager at 6097 and you were doing third
 12 interviews and you were making people job offers, did
 13 you view the process as fairly subjective?
 14 A. Meaning it was --
 15 Q. Basically up to you.
 16 A. Based on, yeah, the program that we had,
 17 yes. It wasn't just what I thought. It was within
 18 the -- the whole interview process.
 19 Q. But Wal Mart gave you no checklist where you
 20 could interview somebody and check off one, two, three,
 21 four, five, you're hired or cross off, one, two, three
 22 four, five, you're not hired.
 23 A. Right. There was no checklist, that's
 24 correct.
 25 Q. So it was up to you.

1 A. Pretty much.⁵³

Testifying about the ten questions listed on the Second Interview Comment Sheet used prior to 2002, Mr. Earls observed both that the process was subjective and that decision-makers had full discretion regarding how to weigh responses to the questions. As noted above, these are aspects of decision-making processes that social science research has identified as creating the potential for gender (and racial) bias. Mr. Earls testified as follows:

10 Q. Okay. I guess what I'm hearing you say --
 11 you correct me if you think I'm mischaracterizing

⁵²Miller depo., p. 34-38.

⁵³Giles depo., p. 139.

12 you -- is that it's a subjective appraisal of that
 13 person that's going to dictate whether or not that
 14 person is considered for employment?
 15 A. Yes.
 16 Q. Okay. Meaning then that -- where there is
 17 nothing about these 10 questions or the answers to
 18 them that are set up as an objective screen, meaning
 19 you say X to answering No. 3, and that's going to
 20 knock you out of contention?
 21 A. Correct.
 22 Q. Okay. Do you know if any of these
 23 questions are weighted?
 24 A. No, I do not know that.
 25 Q. Okay. Anybody at Wal-Mart ever told you
 1 that they were weighted?
 2 A. No.⁵⁴

Mr. Earls testified that he received no directive from the company regarding specific qualities to look for in applicants, nor had he ever seen a list of minimum qualifications for the order filler position. To him, the minimum qualifications were coming to work every day and the ability to do the lifting and twisting required of the job. Asked how he would assess a candidate on the qualification of coming to work every day, Mr. Earls testified that it was "just a feeling you get by listening to them talk to you."⁵⁵

31. In similar testimony, Mr. Reynolds stated that the decision to approve a candidate at the first interview was a "judgment call." In his view, "it's all subjective." He also described how in his conversation with the applicant he would "read their emotions." According to Mr. Reynolds, he had never seen a written description of the interview process (apart from the comment sheets to be completed when doing interviews), and there were no specific qualifications he was looking for in making a

⁵⁴Earls depo., p. 170-171. In describing how he evaluated responses to the questions on the Third Interview Comment Sheet, Mr. Earls testified that there was no response that would necessarily make the applicant ineligible for employment and no particular response that he was seeking to indicate an applicant's qualifications for being hired (Earls depo., p. 172). Mr. Earls went on to describe how he made up his own question, asking applicants to rate themselves on a scale of 1 to 10 on effectiveness and to list strengths and weaknesses, and then testified that there was nothing in particular he was looking for in the response. According to Mr. Earls, he would take into consideration "the way they were talking to me, making eye contact and being honest" (Earls dep., p. 181-182).

⁵⁵Earls depo., p. 50-52, 106-109. On the lack of any statement of minimum qualifications apart from the matrix of essential job functions, also see Akers depo., p. 81-82, Miller depo., p. 31-32, and Reynolds depo., p. 77-79.

decision to approve an applicant for moving forward in the process. There was no specific weighting of applicants' responses to interview questions, and no one factor would determine whether a candidate was approved or not. Instead he would "look at everything."⁵⁶ Similarly, Mr. Akers testified that there was no specific weighting of the factors he considers in conducting interviews. Instead, the interview is a "fluid situation" in which he makes decisions on the spot about which questions and answers are relevant to specific factors he is looking for.⁵⁷

Equal Employment Opportunity Policies and Practices and Training for Managers on the Hiring Process Were Insufficient for Minimizing Gender Bias at 6097

32. Gender bias in personnel decisions is not inevitable, and the social science research summarized above and related scholarship demonstrates that the effects of gender stereotypes and the sex-labeling of jobs on evaluative judgments such as those involved in hiring and assessments of skills and qualifications can be minimized when decision-makers know that they will be held accountable for the criteria used to make decisions, for the accuracy of the information upon which the decisions are based, and for the consequences their actions have for equal employment opportunity.⁵⁸

⁵⁶Reynolds depo., p. 48-50, 140-141, 162-163.

⁵⁷Akers depo., p. 94-95.

⁵⁸S. T. Fiske, M. Lin, and S. L. Neuberg, "The Continuum Model: Ten Years Later," p. 231-54 in *Dual Process Theories in Social Psychology*, edited by S. Chaiken and Y. Trope, Guilford Press, 1999; T. E. Nelson, M. Acker and M. Manis, "Irrepressible Stereotypes," *Journal of Experimental Social Psychology*, Vol. 32, 1996, p. 13-38; J. L. Eberhardt and S. T. Fiske, "Motivating Individuals to Change: What Is a Target to Do?" p. 369-415 in *Stereotypes and Stereotyping*, edited by C. N. MacRae, C. Stangor, and M. Hewstone, Guilford Press, 1996; A. M. Konrad and F. Linnehan, "Formalized HRM Structures: Coordinating Equal Employment Opportunity or Concealing Organizational Practices?" *Academy of Management Journal*, Vol. 38, 1995, p. 787-829; T. F. Pettigrew and J. Martin, "Shaping the Organizational Context for Black American Inclusion," *Journal of Social Issues*, Vol. 43, 1987, p. 41-78; G. R. Salancik and J. Pfeffer, "Uncertainty, Secrecy, and the Choice of Similar Others," *Social Psychology*, Vol. 41, 1978, p. 246-55; C. T. Schreiber, K. F. Price, and A. Morrison, "Workforce Diversity and the Glass Ceiling: Practices, Barriers, Possibilities," *Human Resource Planning*, Vol. 16, 1993, p. 51-69; P. E. Tetlock, "Accountability: The Neglected Social Context of Judgment and Choice," p. 297-332 in *Research in Organizational Behavior*, Vol. 7, edited by L. L. Cummings and B. M. Staw, Jai Press, 1985; P. E.

33. However, formal written policies alone, such as specific guidance on assessing and weighing evaluative criteria, are not sufficient to minimize bias. Passive organizational approaches to the prevention of discrimination that take action only after an incident is brought to the attention of management are often ineffective. A written antidiscrimination policy that is simply reactive, responding to complaints, and lacking effective accountability, is often a symbolic exercise in "going through the motions," with little substantive impact on creating organizational policy and practice that is free of bias.⁵⁹ Sociologist and legal scholar Lauren Edelman, the leading expert on this topic, summarizes the findings of fifteen years of research on organizational responses to EEO as follows:

Because it is generally the form rather than the substance of compliance that attains an institutionalized status, there is variation in how enthusiastically management, as well as the personnel who staff compliance structures, embraces legal ideals. In some cases, structures have both symbolic and substantive significance -- their form signals attention to legal ideals and they operate to enhance the workplace status and conditions of legally protected employees. In other cases, however, the structures fit the law in form but lack substantive effect. Organizations may strategically seek to create compliance structures merely as symbolic gestures by "decoupling" those structures from core organizational activities. Organizations may, for example, create affirmative action officer

Tetlock and J. I. Kim, "Accountability and Judgment Processes in a Personality Prediction Task," *Journal of Personality and Social Psychology*, Vol. 52, 1987, p. 700-709. To see how human resource professionals apply these principles in the design of personnel systems, see R. D. Gatewood and H. S. Field, *Human Resource Selection*, Fifth Edition, Dryden Press, 2001; and H. G. Heneman, III, R. L. Heneman, and T. A. Judge *Staffing Organizations*, Third Edition, Mendota House and Richard D. Irwin, 1999.

⁵⁹L. B. Edelman, "Legal Ambiguity and Symbolic Structures: Organizational Mediation of Civil Rights Law," *American Journal of Sociology*, Vol. 97, 1992, p. 1531-1576; L. B. Edelman, S. Patterson, E. Chambliss, and H. S. Erlanger, "Legal Ambiguity and the Politics of Compliance: Affirmative Action Officers' Dilemma," *Law and Policy*, Vol. 13, 1991, p. 73-97; L. B. Edelman, H. S. Erlanger, and J. Lande, "Employers' Handling of Discrimination Complaints: The Transformation of Rights in the Workplace," *Law & Society Review*, Vol. 27, 1993, p. 497-534; L. B. Edelman, Lauren B. and S. Petterson, "Symbols and Substance in Organizational Response to Civil Rights Law," in *Research in Social Stratification and Mobility*, 1999; J. S. Leonard, "Women and Affirmative Action," *Journal of Economic Perspectives*, Vol. 3, 1989, p. 61-75. Also see J. S. Leonard, *Use of Enforcement Techniques in Eliminating Glass Ceiling Barriers*, Report prepared for the U. S. Department of Labor, Glass Ceiling Commission, April 1994.

positions but give the officer little or no autonomy or authority or create grievance procedures that are hard to access and known to provide little relief.⁶⁰

34. The most effective approaches rely on proactive policies and practices, including recurring and mandatory training of managers and supervisors, and systematic and consistent monitoring of outcomes of personnel decisions.⁶¹ Effective accountability also requires explicit evaluation of managers and supervisors on their contributions to an organization's equal opportunity goals. Nearly all medium- to large-scale organizations have a written antidiscrimination policy, and many have a written policy stating that implementing the objectives of the Affirmative Action Plan is the responsibility of every employee. However, such policies are merely symbolic unless they also delineate explicit duties and responsibilities relating to equal opportunity in each manager's or supervisor's job description, which can then be related to specific evaluative dimensions in the performance reviews of those employees. In short, in the area of equal

⁶⁰L. B. Edelman, "Law at Work: The Endogenous Construction of Civil Rights," p. 337-352 in *Handbook on Employment Discrimination Research: Rights and Realities*, edited by R. L. Nelson and L. B. Neilson, Kluwer Academic Press, 2005 (internal citation omitted, quotation on p. 345-346). Also see K. D. Krawiec, "Cosmetic Compliance and the Failure of Negotiated Governance," *Washington University Law Quarterly*, Vol. 81, p. 487-544. On the general issue of decoupling of organizational functions, see D. J. Orton and K. E. Weick, "Loosely Coupled Systems: A Reconceptualization," *Academy of Management Review*, Vol. 15, p. 203-223

⁶¹For a review of monitoring and accountability as strategies for ensuring equal employment opportunity, see Bielby, 2000, *op cit.*; also see S. Sturm, "Second Generation Employment Discrimination: A Structural Approach," *Columbia Law Review*, Vol. 101, 2001, p. 458-568; B. F. Reskin, "Including Mechanisms in Our Models of Ascriptive Inequality," *American Sociological Review*, Vol. 68, 2003, p. 1-21 (see, especially, p. 12-14); and A. Kalev, F. Dobbin, and E. Kelly, "Best Practices or Best Guesses? Assessing the Efficacy of Corporate Affirmative Action and Diversity Policies," *American Sociological Review*, Vol. 71, 2006, p. 589-617. For an example of policies and practices used by human resources professionals for establishing effective monitoring and accountability, see D. Kennedy, *Accountability: Establishing Shared Ownership*, Berrett-Koehler Communications, 2000.

employment opportunity ("EEO") as well as other aspects of human resources, "what gets measured gets done."⁶²

35. Prior to 2002 managers who participated in the hiring process at 6097 received little in the way of formal training on company policy and practice for hiring into entry-level jobs. The main form of training for someone new to the hiring process was to "shadow" a more experienced manager, observing how that manager conducts interviews.⁶³ In effect, this form of training serves to perpetuate the *status quo*, as new managers learn the discretionary and subjective practices engaged in by their more experienced peers. The second form of training came from discussions at the Monday coaches' meetings, where topics related to hiring would sometimes be raised. However, the deposition testimony indicates that such training rarely went beyond basic topics such as appropriate and inappropriate questions to ask in an interview, directives not to discriminate, and emphasis on the importance of "hiring the best."⁶⁴ Eugene Reynolds, Michael Giles, Vince Biondo, and Jim Gulock testified about training they received at the Walton Institute at corporate headquarters, and that training focused primarily on the company culture and its "Three Basic Beliefs."⁶⁵ Jim Reeves, the personnel manager who presided over the hiring process at 6097 from approximately late 1998 to 2002 testified that during that period he received no training on personnel management from

⁶²M. Giovannini, "What Gets Measured Gets Done: Achieving Results Through Diversity and Inclusion," *Journal for Quality and Participation*, Vol. 27, 2004, p. 21-27; S. Kerr, "On the Folly of Rewarding A, While Hoping for B." *Academy of Management Journal*, Vol. 18, 1975, p. 769-783; Bielby, 2000, *op cit*.

⁶³Gulock depo., p. 26; Miller depo., p. 19-20, 30; Reynolds depo., p. 89-92.

⁶⁴Biondo depo., p. 67-68; Giles depo., p. 39-40, 147-149; Gulock depo., p. 85-86; Earls depo., p. 79-89; Miller depo., p. 24-26, 80-81; Reynolds depo., p. 17-18, 47-48, 54, 87-89; Reeves depo., p. 77; Holland depo., p. 12-14.

⁶⁵Giles depo., p. 147-149; Gulock depo., p. 107-110, 275-276; Biondo depo., p. 127; Reynolds depo., p. 90.

Wal-Mart other than the meetings at the home office held every other year where some topics relating to interviewing and changes in the law would come up.⁶⁶

36. In sum, none of the managers participating in or overseeing the hiring process were receiving regular training on the importance of relying on written, job-relevant criteria, on the importance of having an accurate, systematic process for ascertaining the qualifications of job applicants and having monitoring and oversight over that process. Nor were they receiving training on specific criteria to be used in making hiring decisions, how to reliably assess candidates' qualifications on those criteria, and how to weigh the information obtained from interviews with applicants. Thus, it is not surprising that managers' testimony about how they made hiring decisions describes a process that is highly discretionary and subjective and that personnel managers and general managers did no systematic auditing of the hiring process.⁶⁷ Nor is it surprising that managers testified to having arbitrary and inconsistent practices regarding documenting in a written record the reasons for approving or not approving that a candidate move forward in the hiring process, and that they often recorded written comments about aspects of applicants' personal and family situations that were irrelevant to the job.⁶⁸ As noted above, this kind of irrelevant information can increase the impact of stereotyping on decision-making.

37. Diversity training given to managers at 6097 rarely went beyond an emphasis on the value of a diverse workforce and the importance of keeping an open mind about

⁶⁶Reeves depo., p. 66-67. Mr. Reeves testified that during the same period he attended a one-day seminar offered by a local law firm and two seminars offered by the EEOC.

⁶⁷Reeves depo., p. 137-138, 147-150; Akers depo., p. 14-16, 64-70, 112-115, 128; Biondo depo., p. 27-28, 56-57, 84, 115.

⁶⁸Biondo depo., p. 65, 82-98, 103-105; Giles depo., p. 282-289; Reeves depo., p. 286-287; Earls depo., p. 155-156; Miller depo., p. 136-137; Reynolds depo., p. 41-42, 140-141, 186-188.

applicants from diverse backgrounds. No one reported receiving training on concrete steps or action plans to use to achieve a diversity.⁶⁹ Recent social science research indicates that this kind of diversity training rarely contributes in a measurable way to creating a more diverse workforce, and it may even have the opposite effect.⁷⁰

Why Did the Gender Disparity in Offer Rates Decline at 6097 Beginning in 2002?

38. Social science research shows that organizational policies and practices, once in place, become institutionalized, establishing what organizational scholars refer to as "organizational inertia." As a result, institutionalized policies and practices rarely change in the absence of any substantial change in a firm's business, technical, or legal environment.⁷¹ The decline in gender disparities in hiring at 6097 that began in 2002 and continued into subsequent years is unlikely to have taken place without a significant change in policy and practice relating to hiring for entry-level jobs. One significant

⁶⁹Biondo depo., p. 112-115, 118-131; Reeves depo., p. 71-72, 76-77; Gulock depo., p. 141-145, 275-276; Akers depo., p. 71-72, 76-79, 131-135; Reynolds depo., p. 18, 93-94; Earls depo., p. 80, 134-136; Miller depo., p. 75-78.

⁷⁰Kalev *et al.*, *op cit.*; J. Denis, "More than 'Window Dressing'? The Conditional Effects of Diversity Training on Managerial Diversity: The Importance of Commitment," Working Paper, Department of Sociology, Harvard University, 2007.

⁷¹L. Stinchcombe, "Social Structure and Organizations," p. 142-93 in *Handbook of Organizations*, edited by J. G. March, Rand McNally, 1965; M. T. Hannan and J. H. Freeman, "Structural Inertia and Organizational Change," *American Sociological Review*, Vol. 43, 1984, p. 143-164; J. N. Baron, "Organizational Evidence of Ascription in Labor Markets," in *New Approaches to Economic and Social Analyses of Discrimination*, edited by R. Cornwall and P. Wunnava, Praeger, 1991. The concept of organizational inertia has been applied in scientific studies conducted in a wide range of industrial settings. For reviews, see S. Kaplan and R. Henderson, "Inertia and Incentives: Bridging Organizational Economics and Organizational Theory," *Organization Science: A Journal of the Institute of Management Sciences*, Vol. 16, 2005, p. 509-521; and C. Gresov, H. A. Haveman, and T. A. Oliva, "Organizational Design, Inertia, and the Dynamics of Competitive Response," *Organization Science: A Journal of the Institute of Management Sciences*, Vol. 4, 1993, p. 181-208. Also see, for example, J. Roggema and M. H. Smith, "Organizational Change in the Shipping Industry: Issues in the Transformation of Basic Assumptions," *Human Relations*, Vol. 36, 1983, p. 765-790; E. Abrahamson and C. J. Fombrun, "Macrocultures: Determinants and Consequences," *Academy of Management Review*, Vol. 19, 1994, p. 728-755; L. Gardenswartz and A. Rowe, "Diversity Management: Practical Application in a Health Care Organization," *Frontiers of Health Services Management*, Vol. 11, 1994, p. 36-40; G. T. Fairhurst, S. Green, and J. Courtright, "Inertial Forces and the Implementation of a Socio-technical Systems Approach: A Communication Study," *Organization Science*, Vol. 6, 1995, p. 168-185; C. Doucouliagos, "Conformity, Replication of Design and Business Niches," *Journal of Economic Behavior & Organization*, Vol. 30, 1996, p. 45-62; and M. Ruef, "Assessing Organizational Fitness on a Dynamic Landscape: An Empirical Test of the Relative Inertia Thesis," *Strategic Management Journal*, Vol. 18, 1997, p. 837-853.

change introduced in 2002 was the behavioral interviewing process, a structured approach to interviewing that is designed to improve consistency and validity in selection decisions.⁷² Implemented properly, it should also reduce discretion and subjectivity. In addition, around the same time there was a significant change in the legal environment of Wal-Mart's London, Kentucky distribution facility. The EEOC litigation against 6097 was filed in mid-2001, and the First Amended Complaint in the *Dukes et al. v. Wal-Mart* litigation against Wal-Mart Stores was filed around the same time. Social science research shows that discrimination lawsuits are often followed by changes to personnel practices that reduce bias.⁷³ Finally, the changes in the process and underlying philosophy for conducting job interviews at 6097 overlapped with the introduction of systematic monitoring of the gender composition of the workforce in a way that was linked to diversity goals for managers.⁷⁴ Social science research shows that the establishment of goals as part of a proactive approach to diversity management also reduces gender disparities.⁷⁵

⁷²H. Steensma and C. Doreleijers, "Personnel Selection: Situational Test or Employment Interview: The Validity Versus Justice Dilemma," *Journal of Individual Employment Rights*, Vol. 10, 2001-2002, p. 215-232; J. D. Bragger, E. Kutcher, J. Morgan and P. Firth, "The Effects of the Structured Interview on Reducing Biases Against Pregnant Job Applicants," *Sex Roles*, Vol. 46, 2002, p. 215-226; T. S. Turner, *Behavioral Interviewing Guide*, Trafford Publishing, 2004.

⁷³A. Kalev and F. Dobbin, "Enforcement of Civil Rights Law in Private Workplaces: The Effects of Compliance Reviews and Lawsuits over Time," *Law and Social Inquiry*, forthcoming; S. Skaggs, "Discrimination Litigation: Implications for Women and Minorities in Retail Supermarket Management," Ph.D. dissertation, Department of Sociology, North Carolina State University, Raleigh, NC., 2001; J. N. Baron, B. S. Mittman, and A. E. Newman, "Targets of Opportunity: Organizational and Environmental Determinants of Gender Integration within the California Civil Services, 1976-1985," *American Journal of Sociology*, Vol. 96, 2001, p. 1362-1401.

⁷⁴Biondo depo., p. 132-133, 139-145; Reeves depo., p. 21-22; Holland depo., p. 115-116. Also see: Giles depo., p. 85-86, testifying that when he returned to 6097 in 2005 it had become policy and practice to document reasons for decisions about whether or not to advance an applicant through the hiring process; and Akers depo., p. 8-14 on the introduction of monthly reports on the workforce gender composition.

⁷⁵J. L. Leonard, "What Promises are Worth: The Impact of Affirmative Action Goals," *Journal of Human Resources*, Vol. 20, 1985, p. 3-20; J. L. Leonard, "Women and Affirmative Action," *Journal of Economic Perspectives*, Vol. 3, 1989, p. 61-75; B. F. Reskin, *The Realities of Affirmative Action in Employment*, American Sociological Association, 1998; Kalev *et al.*, *op cit.*

39. While there were significant changes in the company's legal environment, the introduction of some proactive diversity efforts, and a change in interviewing policy and practice that should have reduced discretion, vulnerabilities remain. From the materials I have reviewed, it is not clear whether the introduction of behavioral interviewing was implemented effectively and the extent to which it reduced unnecessary discretion and subjectivity in the interview process. Most managers did not mention getting trained on behavioral interviewing when they described the training they had received (or had given) on the interview process. Moreover, one manager used the term "behavioral interviewing" to describe a highly subjective practice (observing whether an applicant "scoots back" or frowns as a way of assessing confidence), suggesting that at least in his case the approach was not implemented successfully.⁷⁶ In addition, the nature of diversity and EEO training appears to have changed little since 2000, with little emphasis on action plans for achieving diversity and minimizing bias, and some managers who reported having access to diversity reports testified that they did nothing with that information.⁷⁷ The persistence of statistically significant (albeit smaller) gender disparities in the period from 2002 to 2004 is consistent with these deficiencies in the changes made during that period.

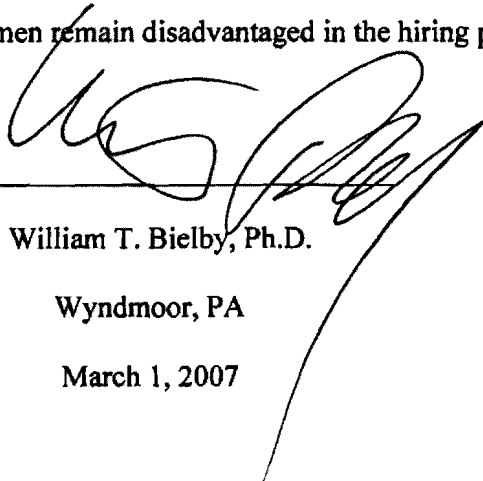
Conclusion

40. At Wal-Mart's London, Kentucky distribution facility, women are hired into entry level jobs at a rate much lower than men. Beginning in 2002 the magnitude of the disparity declined substantially, although it remained statistically significant. Relying on

⁷⁶Reynolds depo., p. 30.

⁷⁷Miller depo., p. 75, 84-85 (has done nothing to try to achieve more gender diversity at 6097 because it is not his responsibility); Gulock depo., p. 146 (diversity is not his responsibility); Akers depo., p. 15-16 (does not use the monthly diversity report in any particular way "other than knowledge"); Reeves p. 24-25 (did not use the diversity report for any particular purpose when he was at 6097 and does not do so now).

social science research on the organizational factors that create and minimize barriers to equal employment opportunity, I have concluded that highly subjective and arbitrary criteria and processes for making hiring decisions, coupled with a lack of monitoring and oversight, explains why female applicants are were hired at a rate that was just a fraction of the male rate prior to 2002. Changes made to hiring policies explain why the disparity shrank beginning in 2002, and deficiencies in the changes that were made explain why women remain disadvantaged in the hiring process.



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Wyndmoor, PA

March 1, 2007

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TESTIMONY AS AN EXPERT WITNESS SINCE 2001

Marybeth Cremin, et al. v. Merrill Lynch, Pierce, Fenner & Smith Inc.

Docket No: 96 C 3773

Court: United States District Court, Northern District of Illinois, Eastern Division

Counsel: Stowell & Friedman, Chicago, IL

Expert Report, Arbitration Testimony

Pamela K. Martens, et al. v. Smith Barney, Inc., et al.

Docket No. 96 Civ. 3779 (AGS)

Court: United States District Court, Southern District of New York

Counsel: Stowell & Friedman, Chicago, IL

Expert Reports, Arbitration Testimony

Lucy's Sales, et al. v. County of Contra Costa, et al.

Docket No. C98-02955 PJH (JL)

Court: United States District Court, Northern District of California

Counsel: Lawyers' Committee for Civil Rights of the San Francisco Bay Area (Oren Sellstrom)

Wilson Sonsini Goodrich & Rosati (Lisa Davis, David Berger), Palo Alto

Expert Report, Deposition Testimony, Trial Testimony

Eduardo Amezcua, et al. v. State of California, Department of Transportation, et al.

Docket No: 814381

Court: Superior Court of the State of California, County of Orange

Counsel: Allred, Maroko & Goldberg (Dolores Y. Leal), Los Angeles

Missey Jefferson, et al. v. Ingersoll International, Inc., et al.

Docket No. 98 C 50042

Court: United States District Court, Northern District of Illinois, Western Division

Counsel: Jeanne Szromba, EEOC

Curtis V. Rodriguez, et al. v. California Highway Patrol, et al.

Docket No. C-99-20895-JF/EAI

Court: United States District Court, Northern District of California

Counsel: Kecker & Van Nest (Roy Austin), San Francisco

American Civil Liberties Union Foundation of Southern California

Expert Report

Ella Bramwell and Marilyn Hill v. BMG Entertainment, Inc.

Docket No. 00C 7751

Court: United States District Court, Eastern District of Illinois

Counsel: Stowell & Friedman (Linda Friedman), Chicago

Expert Report, Deposition Testimony

Eric Bates, et al. v. United Parcel Service

Docket No. C-99 2216 (TEH)

Court: United States District Court, Northern District of California

Counsel: Schneider & McCormac (Todd Schneider), San Francisco

Declaration, Expert Report, Deposition Testimony

Prabhavati Rao v. County of Ventura

Docket No. CV 01-00982 GAF (MCx)

Court: United States District Court, Central District of California

Counsel: Janet M. Koehn, Ventura, CA

Expert Report

Frank Armenta, et al. v. Osmose Wood Preserving, Inc.

Case No. CV000999

Court: Superior Court of the State of California, County of San Luis Obispo

Counsel: James H. Cordes, Santa Barbara, CA

Declaration

Francisco Rodriguez, et al. v. Merrill Lynch & Co.

Docket No. L-5908-98

Court: Superior Court of New Jersey, Law Division: Hudson County

Counsel: Steven Arenson, Arenson, Dittmar & Karbani, New York

Declaration, Expert Report, Deposition Testimony

Carol Goshu, et al. v. U.S. Bancorp Piper Jaffray, Inc.

Docket C 00-01611 PJH

Court: United States District Court, Northern District of California

Counsel: Meites, Mulder, Burger & Mollica, Chicago

Declaration, Expert Report, Deposition Testimony

Betty Dukes, et al. v. Wal-Mart Stores, Inc.

Docket C-01-2252 MJJ

Court: United States District Court, Northern District of California

Counsel: The Impact Fund (Jocelyn Larkin, Brad Seligman)

Expert Report, Deposition Testimony

Mary Singleton, et al. v. Regents of the University of California, et al.

Docket 807233-1

Court: Superior Court of the State of California, County of Alameda

Counsel: The Sturdaent Law Firm (Mark Johnson), San Francisco

Declarations

Equal Employment Opportunity Commission v. The Herrick Corporation d/b/a/ Stockton Steel

Docket CIV. S-00-0102 FCD DAD

Court: United States District Court, Eastern District of California

Counsel: EEOC (Lynn Palma), San Francisco

Expert Report

EEOC & Schieffelin v. Morgan Stanley

Docket 01 CV 8421 (RMB)

Court: United States District Court, Southern District of New York

Counsel: Outten & Golden (Adam Klein), New York, EEOC (Michael Ranis)

Expert Report, Deposition Testimony

Stella Mitchell, et al. v. Metropolitan Life Insurance Co.

Docket 01-CIV-2112 (WHP)

Court: United States District Court, Southern District of New York

Counsel: Saperstein, Goldstein, Demchak & Ballar (Teresa Demchak), Outten & Golden (Adam Klein)

Expert Report, Deposition Testimony

Roderick Arnold, et al. v. Cargill, Inc.

Docket 01-CV-2086 (DWF/AJB)

Court: United States District Court, District of Minnesota, Fourth Division

Counsel: Sprenger & Lang; Cohen, Milstein, Hausfeld & Toll

Expert Report, Deposition Testimony, Declaration

Derrick Satchell, et al. v. FedEx Express.

Docket C 03-2659 SI, C 03-2878 SI

Court: United States District Court, Northern District of California

Counsel: Lief, Cabraser, Heimann & Bernstein (James Finberg)

Expert Report, Deposition Testimony

Eduardo Gonzalez, et al. v. Abercrombie & Fitch Stores, Inc.

Docket 03-2871-SI

Court: United States District Court, Northern District of California

Counsel: Lief, Cabraser, Heimann & Bernstein (Bill Lann Lee)

Daryal Nelson, et al. v. Wal-Mart Stores, Inc. and Wal-Mart Transportation LLC

Docket 2:05 CV-00134-WRW

Court: United States District Court, Eastern District of Arkansas

Counsel: of Cauley Bowman Carney & Williams (Hank Bates) and Welch and Kitchens (Morgan Welch)

Expert Report, Deposition Testimony

Nilda Gutierrez, et al. v. Johnson & Johnson

Docket 01-5302 (WHW)

Court: United States District Court, District of New Jersey

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Expert Rebuttal Report, Deposition Testimony

Derrick Satchell, et al. v. FedEx Express

Docket C 03-2659 SI, C 03-2878 SI

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Expert Report, Rebuttal Report, Deposition Testimony

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EDUCATION:

B.S. Electrical Engineering (High Honors), University of Illinois--Urbana, 1970.
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PREVIOUS POSITIONS:

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American Bar Foundation, Chicago, IL, Visiting Scholar, 2003-2004
Visiting Professor, Graduate School of Management, UCLA, 1985
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Research Associate, Institute for Research on Poverty, University of Wisconsin, 1975-77
Rhythm guitar, bass guitar, The Newporters, Harvey, Illinois, 1960-1965, 2006-present

HONORS AND AWARDS:

Reuben Hill Research and Theory Award from the National Council on Family Relations, 1992
Sociological Research Association (by election, 1989)
Kathleen Gregory Klein Award for Excellence in Feminist Studies from the Popular and
American Culture Associations, 1986
Fellow, Center for Advanced Study in the Behavioral Sciences, Stanford, California, 1983-84.
European Group on Organizational Sociology Award, Organizations & Occupations Section,
American Sociological Association, 1981 (with J. N. Baron)
Eta Kappa Nu, Electrical Engineering Honorary Society
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PROFESSIONAL ACTIVITIES:

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American Sociological Association
American Economic Association
American Statistical Association
Society of Labor Economists
Society for Human Resource Management

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President, American Sociological Association, 2002-2003
Council, American Sociological Association, 1998-2001
Committee on Sections, American Sociological Association, 1998-2001 (Vice-Chair, 2000-2001)
Committee on Nominations, American Sociological Association, 1995-97
Council, (1982-84) and Secretary/Treasurer (1984-88), Methods Section of the American
Sociological Association.
Council (1986-88), Organizations and Occupations Section of the American Sociological
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Editorial Board:

American Sociological Review (1994-1996)
Westview Series on Social Inequality (1991-1996)
Sociological Methods and Research (1978-1989, 1994-1998)
American Journal of Sociology (1982-84)
Sociology of Education (1981-85)
Gender & Society (1997-2000)

PROFESSIONAL ACTIVITIES (continued):

Member:

Social Science Research Council Site Selection Committee, First Year Fellowships in the Study of the Former Soviet Union (1989-1995)
 National Institute of Mental Health, Social Science and Population Study Section Review Panel, (Special Reviewer, 1994)
 National Institute of Health, Center for Scientific Review (Special Emphasis Panel Chairperson, August 1999)
 National Institutes of Health, International Studies on Health and Economic Development Review Committee (November 2000)
 Social Science Research Council Committee on the Sociological Study of the USSR (1988-92)
 Jessie Bernard Award Selection Committee, American Sociological Association (1990-92)
 Social Science Research Council Committee on Occupational Measurement (1980-88)
 National Science Foundation, Sociology Review Panel (1985-87)
 National Science Foundation, ADVANCE Institutional Transformation Awards Review Panel (2001)
 University of Illinois Foundation (1999-2005)
 Program Committee, American Sociological Association Annual Meeting, 2001
 Board of Directors, Consortium of Social Science Associations (2002-2004)
 Amicus Brief Task Force, American Sociological Association (2002-2003)
 Sociology Ph.D. Program Assessment Committee, University of California, Irvine, April, 2003
 Oversight Committee, Workshop on the Utilization of Women-Owned Small Businesses in Federal Contracting, National Research Council, National Academy of Sciences, 2004
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PUBLICATIONS:

- 2007 William T. Bielby and Pamela Coukos
 "Statistical Dueling' with Unconventional Weapons: What Courts Should Know about Experts in Employment Discrimination Class Actions." *Emory Law Journal*, Vol. 56, forthcoming.
- 2006 William T. Bielby
 "Promoting Racial Diversity at Work: Challenges and Solutions." Forthcoming in Arthur P. Brief and Jill Bradley (eds.), *Diversity at Work*. New York: Cambridge University Press.
- 2005 William T. Bielby
 "Applying Social Research on Stereotyping and Cognitive Bias to Employment Discrimination Litigation: The Case of Allegations of Systematic Gender Bias at Wal-Mart Stores." In Robert L. Nelson and Laura Beth Neilsen (eds.), *Handbook on Employment Discrimination Research: Rights and Realities*. Norwell, MA: Kluwer Academic Press 2005.
- 2005 Arleen Leibowitz, William T. Bielby, Jonathan S. Leonard, Patricia A. Roos, J.H. (Rip) Verkerke, and John E. Rolph
Analyzing Information on Women-Owned Small Business in Federal Contracting. (Report of Steering Committee for the Workshop on Women-Owned Small Business in Federal Contracting.) Washington, D.C.: National Academy Press.

- 2004 William T. Bielby
"Rock in a Hard Place: Grass-Roots Cultural Production in the Post-Elvis Era."
American Sociological Review, Vol. 69, No. 1: 1-13.
- 2004 William T. Bielby
"Social Science Accounts of the Maternal Wall: Applications in Litigation Contexts."
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- 2003 William T. Bielby
"Can I Get A Witness? Challenges of Using Expert Testimony on Cognitive Bias in
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- 2003 Denise D. Bielby and William T. Bielby.
"Beyond Contexts: Taking Cultural Objects Seriously in Media, Popular Culture, and the
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Primetime Programming Strategies." *Journal of Broadcasting and Electronic Media*,
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"ASA Submits Amicus Brief in U.S. Affirmative Action Supreme Court Case."
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2003.
- 2002 Denise D. Bielby and William T. Bielby
"Hollywood Dreams, Hard Realities: Writing for Film and Television." *Contexts*, Vol.
1: 21-27, Fall/Winter 2002.
- 2002 William T. Bielby and Denise D. Bielby
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Hard for the Money." Pp. 193-217 in Mauro F. Guillen, Randal Collins, Paula England,
and Marshall Meyer (eds.), *The New Economic Sociology: Developments in an Emerging
Field*. New York: Russell Sage Foundation.
- 2001 Denise D. Bielby and William T. Bielby
"Audience Segmentation and Age Stratification Among Television Writers." *Journal of
Broadcasting and Electronic Media*, Vol. 45, No. 3: 391-412, Summer, 2001.

- 2000 William T. Bielby
"Minimizing Workplace Gender and Racial Bias." *Contemporary Sociology*, Vol 29, No. 1: 120-129, January, 2000.
- 1999 William T. Bielby
"Framing Sociology in Court: Affirmative Action Discourse and Expert Testimony on Employment Discrimination." *Research on Social Stratification and Mobility*, Vol. 17: 265-283, 1999.
- 1999 Denise D. Bielby, C. Lee Harrington, and William T. Bielby
"Whose Stories Are They? Fans' Engagement with Soap Opera Narratives in Three Sites of Fan Activity." *Journal of Broadcasting and Electronic Media*, Vol. 42, No. 2: 35-51, Spring, 1999. Reprinted in Toby Miller (ed.), *Television: Critical Concepts in Media and Cultural Studies*, New York: Routledge, 2002
- 1999 William T. Bielby and Denise D. Bielby
"Organizational Mediation of Project-Based Careers: Talent Agencies and the Careers of Screenwriters." *American Sociological Review*, Vol. 64, No. 1: 64-85, February, 1999.
- 1998 Bielby, William T. and Denise D. Bielby.
The 1998 Hollywood Writers' Report: Telling ALL Our Stories. Los Angeles, CA: Writers Guild of America, West, 53 p.
(<http://www.wga.org/manuals/Report/index2.html>)
- 1997 Matt L. Huffman, Steven C. Velasco, and William T. Bielby
"Where Sex Composition Matters Most: Comparing the Effect of Job Versus Occupational Sex Composition on Earnings." *Sociological Focus*, Vol. 29, No. 3: 189-207, August, 1997.
- 1996 Bielby, Denise D. and William T. Bielby
"Women and Men in Film: Gender Inequality among Writers in Culture Industries." *Gender & Society*, Vol. 10, No. 3: 248-270, June, 1996. Reprinted in Paula Dubeck and Dana Dunn (eds.), *Workplace/Women's Place*, Belmont, CA. Roxbury, 2002.
- 1994 Bielby, William T. and Denise D. Bielby
"'All Hits are Flukes:' Institutionalized Decision-Making and the Rhetoric of Network Prime-Time Program Development." *American Journal of Sociology*, Vol. 99, No. 5: 1287-1313, March, 1994. Reprinted in Toby Miller (ed.), *Television: Critical Concepts*, New York and London, Routledge, 2002.
- 1994 Bielby, William T. and Denise D. Bielby
"The Production of Mass Culture." *Footnotes*, Vol. 22, No. 4, April, 1994. Washington, DC: American Sociological Association.
- 1993 Bielby, Denise D. and William T. Bielby
"The Hollywood 'Graylist'? Audience Demographics and Age Stratification Among Television Writers." *Current Research on Occupations and Professions*, Vol. 8: 11-172.
- 1993 Bielby, William T.
"Aging in the Television Industry." Pp. 34-37, 74-76 in *Age Has A Future: Maturity and the Media*. Conference Proceedings published by the American Association of Retired Persons, Washington, DC.

- 1993 Bielby, William T. and Denise D. Bielby.
The 1993 Hollywood Writers' Report: A Survey of the Employment of Writers in the Film, Broadcast, and Cable Industries for the Period 1987-1991. West Hollywood, CA: Writers Guild of America, West, 52 p.
- 1992 Bielby, William T. and Denise D. Bielby
"Cumulative Disadvantage in an Unstructured Labor Market: Gender Differences in the Careers of Television Writers" *Work and Occupations*, Vol. 19, No. 4: 366-386, November, 1992. Reprinted in Jerry A. Jacobs (ed.), *Sex Segregation at Work*, Newbury Park, CA, Sage, 1994.
- 1992 Bielby, William T. and Denise D. Bielby
"I Will Follow Him: Family Ties, Gender-Role Beliefs, and Reluctance to Relocate for a Better Job," *American Journal of Sociology*, Vol. 97, No. 5: 1241-1267, March, 1992 (Winner of the 1992 Reuben Hill Research and Theory Award from the National Council on Family Relations).
- 1992 Bielby, William T. "The Structure and Process of Sex Segregation." Pp. 97-112 in Richard Cornwall and Phanindra Wunnava (eds.), *New Approaches to Economic and Social Analyses of Discrimination*. New York: Praeger. Reprinted in David B. Grusky (ed.), *Social Stratification: Class, Race, and Gender in Sociological Perspective*, Second Edition, Boulder, CO: Westview Press, 2001.
- 1991 Bielby, William T. and Ross N. Matsueda
"Statistical Power in Nonrecursive Linear Models," in Peter V. Marsden (ed.), *Sociological Methodology*, Vol. 21: 167-197.
- 1991 Bielby, William T.
"Sex Differences in Careers: Is Science a Special Case?" Pp. 171-187 in H. Zuckerman, J. R. Cole, and J.T. Bruer (eds.), *The Outer Circle: Women in the Scientific Community*. New York: Norton. Reprinted (German translation) in Beate Kraus (ed.), *Wissenschaftskultur und Geschlechterordnung*, Frankfurt: Campus Verlag.
- 1989 Bielby, William T. and Denise D. Bielby
"Family Ties: Balancing Commitments to Work and Family in Dual Earner Households," *American Sociological Review*, Vol. 54, No. 5: 776-789, October, 1989.
- 1989 Bielby, W.T. and Bielby, D.D.
The 1989 Hollywood Writers' Report: Unequal Access, Unequal Pay. West Hollywood, CA: Writers Guild of America, West, 112 p.
- 1988 Bielby, Denise D. and William T. Bielby
"She Works Hard for the Money: Household Responsibilities and the Allocation of Work Effort," *American Journal of Sociology*, Vol. 93, No. 5: 1031-1059, March, 1988 (Winner of the 1986 Kathleen Gregory Klein Award for Excellence in Feminist Studies from the Popular and American Culture Associations).
- 1988 Bielby, Denise D. and William T. Bielby
"Women's and Men's Commitment to Paid Work and Family: Theories, Models, and Hypotheses." Pp. 249-253 in B. Gutek, L. Larwood, and A. Stromberg (eds.), *Women and Work, Volume III*. Newbury Park, CA: Sage.
- 1988 Bielby, Denise D. and William T. Bielby
"Sex Differences in the Allocation of Work Effort Among Professionals and Managers."

Pp. 45-67 in R. Schwartz, (ed.), *Women at Work*. Los Angeles: UCLA Institute for Social Science Research.

- 1988 Treiman, Donald J., William T. Bielby, and Man-tsun Cheng
"Evaluating a Multiple-Imputation Method for Recalibrating 1970 U.S. Detailed Industry Codes to the 1980 Standard." *Sociological Methodology*. Vol. 18: 309-345.
- 1988 Bielby, Denise D., William C. Brastow, and William T. Bielby
"Goal Incongruence, Interdependence, and Decision-Making in a 'High-Tech' Firm," *Research in the Sociology of Work*, Vol. 4: 153-178. Revised version published in Russian in V. Yadov (ed.), *Social Organization of Labor: Aspects of the Problem*. Moscow: Soviet Sociological Association, 1989.
- 1987 Bielby, William T.
"Modern Prejudice and Institutional Barriers to Equal Employment Opportunities for Minorities," *Journal of Social Issues*, Vol. 43, No. 1: 79-84, Spring, 1987.
- 1987 Bielby, William T. and Denise D. Bielby
The 1987 Hollywood Writers' Report: A Survey of Ethnic, Gender and Age Employment Factors. West Hollywood, CA: Writers Guild of America, West.
- 1987 Bielby, William T. and James N. Baron
"Undoing Discrimination: Comparable Worth and Job Integration." Pp. 211-229 in Christine Bose and Glenna Spitze (eds.), *Ingredients for Women's Employment Policy*. Albany: State University of New York Press.
- 1986 Baron, James N. and William T. Bielby
"The Proliferation of Job Titles in Organizations," *Administrative Science Quarterly*, Vol. 31, No. 4: 561-586, December, 1986.
- 1986 Baron, James N., Alison Davis-Blake, and William T. Bielby
"The Structure of Opportunity: How Promotion Ladders Vary Within and Among Organizations," *Administrative Science Quarterly*, Vol. 31, No. 2: 248-273, June 1986. Reprinted in Peter Capelli (ed.), *Training and Development, a volume in The International Library of Management*, Aldershot, Hampshire, England, Dartmouth Publishing, 1994.
- 1986 Bielby, William T.
"Arbitrary Metrics in Multiple Indicator Models of Latent Variables," *Sociological Methods and Research*, Vol. 15, No. 1: 3-23, November, 1986.
- 1986 Bielby, William T.
"Arbitrary Normalizations (comments on Sobel, Arminger and Henry), *Sociological Methods and Research*, Vol. 15, No. 1: 62-63, November, 1986.
- 1986 Bielby, William T. and James N. Baron
"Sex Segregation Within Occupations," *American Economic Review*, Vol. 76, No. 2: 43-47, May, 1986.
- 1986 Matsueda, Ross N. and William T. Bielby
"Statistical Power in Covariance Structure Models," *Sociological Methodology* Vol. 16: 120-158.

- 1986 Bielby, William T. and James N. Baron
"Men and Women at Work: Sex Segregation and Statistical Discrimination," *American Journal of Sociology*, Vol. 91, No. 4: 759-799, January, 1986. Reprinted in David B. Grusky (ed.), *Social Stratification: Class, Race, and Gender in Sociological Perspective*, Boulder, CO: Westview Press, 1994. Reprinted in Marianne A. Ferber (ed.), *Women in the Labor Market* (in the series *International Library of Critical Writings in Economics*, Mark Blaug, series editor), Cheltenham, UK: Edward Elgar Publishing, 1998.
- 1985 Baron, James N. and William T. Bielby
"Organizational Barriers to Gender Equality: Sex Segregation of Jobs and Opportunities." Pp. 233-251 in A.S. Rossi (ed.), *Gender and the Life Course*. New York: Aldine, 1985.
- 1984 Bielby, William T. and James N. Baron
"A Woman's Place is With Other Women: Sex Segregation Within Organizations." Pp. 27-55 in B. Reskin (ed.), *Sex Segregation in the Workplace: Trends, Explanations, Remedies*. Washington, D.C.: National Academy Press, 1984.
- 1984 Baron, James N. and William T. Bielby
"The Organization of Work in a Segmented Economy," *American Sociological Review*, Vol. 49, No. 4: 454-473, August, 1984.
- 1984 Bielby, Denise D. and William T. Bielby
"Work Commitment, Sex Role Attitudes, and Women's Employment," *American Sociological Review*, Vol. 49, No. 2: 234-247, April, 1984.
- 1983 Bielby, William T. and James N. Baron
"Organizations, Technology, and Worker Attachment to the Firm." *Research in Social Stratification and Mobility*, Vol. 2: 77-113.
- 1983 Wilson, Thomas P. and William T. Bielby
"Recursive Models for Categorical Data," *Social Science Research*, Vol. 12, No. 2: 109-130, June, 1983.
- 1982 Baron, James N. and William T. Bielby
"Workers and Machines: Dimensions and Determinants of Technical Relations in the Workplace," *American Sociological Review*, Vol. 47, No. 2: 175-188, April, 1982.
- 1981 Bielby, William T.
"Neighborhood Effects: A LISREL Model for Clustered Samples," *Sociological Methods and Research*, Vol. 10, No. 1: 82-111, August, 1981.
- 1981 Bielby, William T.
"Models of Status Attainment." *Research in Social Stratification and Mobility*, Vol. 1: 3-26.
- 1981 Bielby, William T. and Arne L. Kalleberg
"The Structure of Occupational Inequality," *Quality and Quantity*, Vol. 15, No. 2: 125-150, April, 1981.
- 1981 Friedland, Roger O. and William T. Bielby
"The Power of Business in the City." Pp. 131-151 in T. N. Clark and L. C. Ferguson (eds.), *Urban Policy Analysis*. Beverly Hills: Sage Publications, 1981.

- 1981 Hawley, Clifford B. and William T. Bielby
"Research Uses of Longitudinal Survey Data on Women," Pp. 364-386 in R. F. Boruch, P. M. Wortman, and D. S. Cordray (eds.), *Reanalyzing Program Evaluations Policies and Practices for Secondary Analysis of Social and Educational Programs*. San Francisco: Jossey-Bass, 1981.
- 1980 Baron, James N. and William T. Bielby
"Bringing the Firms Back In: Stratification, Segmentation, and the Organization of Work," *American Sociological Review*, Vol. 45, No. 5: 737-765, October, 1980 (Winner of the European Group on Organizational Sociology Award, American Sociological Association, 1981). Reprinted in David B. Grusky (ed.), *Social Stratification: Class, Race, and Gender in Sociological Perspective*. Boulder, CO, Westview Press, 1992.
- 1980 Sanders, Jimmy M. and William T. Bielby
"Revising 'The American Soldier Revisited:' Comment on Butler and Wilson," *Social Science Quarterly*, Vol. 60, No. 2: 333-336, September, 1980.
- 1979 Allen, Richard C. and William T. Bielby
"Blacks' Attitudes and Behaviors Toward Television," *Communications Research*, Vol. 6, No. 4: 437-462, October, 1979.
- 1979 Allen, Richard C. and William T. Bielby
"Blacks' Relationship with the Print Media," *Journalism Quarterly*, Vol. 56, No. 3: 488-496, Autumn, 1979.
- 1977 Bielby, William T. and Robert M. Hauser
"Response Errors in Earnings Functions for Non-black Males," *Sociological Methods and Research*, Vol. 6, No. 2: 241-280, November, 1977. The issue has been reprinted as *Survey Design and Analysis: Current Issues*, D.F. Alwin (ed.), Beverly Hills, CA: Sage Publications, 1978. Article reprinted in *Linear Models in Social Research*, P. V. Marsden (ed.), Beverly Hills, CA: Sage Publications, 1981.
- 1977 Bielby, William T. and Robert M. Hauser
"Structural Equations Models," *Annual Review of Sociology*, Vol. 3: 137-161, 1977.
- 1977 Bielby, William T., Robert M. Hauser, and David L. Featherman
"Response Errors of Black and Non-black Males in Models of the Intergenerational Transmission of Socioeconomic Status," *American Journal of Sociology*, Vol. 82, No. 6: 1242-1288, May, 1977.
- 1977 Bielby, William T., Robert M. Hauser, and David L. Featherman
"Response Errors of Non-black Males in Models of the Stratification Process," in D. J. Aigner and A. S. Goldberger (eds.), *Latent Variables in Socioeconomic Models*. Amsterdam: North-Holland, 1977, revised and expanded in *Journal of the American Statistical Association*, Vol. 72, No. 360: 723-735, December, 1977.
- 1977 Bielby, William T. and James R. Kluegel
"Simultaneous Statistical Inference and Statistical Power in Survey Research Applications of the General Linear Model," *Sociological Methodology*: Vol. 8: 283-312.
- 1974 Bielby, William T. and James R. Kluegel
"Non-random Exogenous Variables in Path Analysis: A Comment," *American Sociological Review*, Vol. 39, No. 6: 888-891, December, 1974.

BOOK REVIEWS AND REVIEW ESSAYS:

- 2001 *Creative Industries: Contracts Between Art and Commerce* by Richard E. Caves. Reviewed in *American Journal of Sociology*, Vol 16, No. 6: 1830-1832.
- 1999 *Organizations in America: Analyzing Their Structures and Human Resource Practices* by Arne L. Kalleberg, David Knoke, Peter V. Marsden, and Joe L. Spaeth. Reviewed in *Administrative Science Quarterly*, Vol. 44, No. 4: 842-846, December 1999.
- 1999 *The Use of Social Science Data in Supreme Court Decisions* by Rosemary J. Erickson and Rita J. Simon. Reviewed in *Contemporary Sociology*, Vol. 28, No. 2: 222-223, March, 1999.
- 1998 "Firm Commitments." Review Essay on *The Time Bind: When Work Becomes Home and Home Becomes Work* by Arlie Russell Hochschild. Contribution to Review Symposium in *Contemporary Sociology* Vol. 27, No. 1: 32-34, January, 1998.
- 1998 *Social Differentiation and Social Inequality: Essays in Honor of John Pock*, edited by James N. Baron, David B. Grusky, and Donald J. Treiman. Reviewed in *Contemporary Sociology*, Vol. 27, No. 2: 152-153, March, 1998.
- 1992 "Organizations, Stratification, and *The American Occupational Structure*." Review essay in *Contemporary Sociology* as part of a 25 year retrospective on Blau and Duncan's *The American Occupational Structure*, Vol. 21, No. 5: 647-650, September, 1992.
- 1992 *Revolving Doors: Sex Segregation and Women's Careers* by Jerry A. Jacobs, and *Doing Comparable Worth: Gender, Class, and Pay Equity* by Joan Acker. Reviewed in *Social Forces*, Vol. 70, No. 4: 1165-1168, June, 1992.
- 1988 *The Process of Occupational Sex-Typing: The Feminization of Clerical Labor in Great Britain* by Samuel Cohen, and *Gender at Work: The Dynamics of Job Segregation by Sex during World War II* by Ruth Milkman. Reviewed in *Social Forces*, Vol. 67, No. 2: 551-553, December, 1988.
- 1986 "Contractual Arrangements." Review of *Households, Employment, and Gender: A Social, Economic, and Demographic View* by Paula England and George Farkas. Reviewed in *Science*, Vol. 232, No. 4753: 1021-1022, May, 1986.
- 1984 "Imperatives of the Organization: Stinchcombe's Techno-Marxism." Review essay on *Economic Sociology* by A. S. Stinchcombe. *American Journal of Sociology*, Vol. 90, No. 1: 192-196, July, 1984.
- 1980 "More Inequality: Christopher Jencks on the Paths to Success." Review essay on *Who Gets Ahead?* by Christopher Jencks, et al. in *Contemporary Sociology*, Vol. 9, No. 1: 754-758, November 1980.
- 1980 *Mathematical Tools for Applied Multivariate Analysis* by P. E. Green. Reviewed in *Contemporary Sociology*, Vol. 9, No. 1: 105-106, January 1980.
- 1979 *Inequality in American Communities* by R. F. Curtis and E. F. Jackson; and *Classes in the United States: Workers Against Capitalists* by C. Loren. Reviewed in *Social Forces*, Vol. 57, No. 3: 982-985, March, 1979.

1977 *Women and the Workplace: The Implications of Occupational Segregation*. Edited by Martha Blaxall and Barbara Reagan. Reviewed in *Social Forces*, Vol. 56, No. 1: 287-289, September, 1977.

TECHNICAL REPORTS:

- 1995 Bielby, William T. and Denise D. Bielby
"Agency Representation and Writers' Employment in Television and Film." Report prepared for the Writers Guild of America, West, West Hollywood, CA, February 1995.
- 1987 Bielby, William T. and Denise D. Bielby
"Employment Opportunities for Television Writers: Continuity and Change from 1960 to the Present." Report prepared for the Writers Guild of America, West Hollywood, CA, October 1987.
- 1983 Bielby, William T.
"Measuring Attributes of Jobs in the Panel Study of Income Dynamics." Report prepared for the National Advisory Board on the Panel Study of Income Dynamics, January, 1983.
- 1983 Nam, Charles B. (Subcommittee Chair), William T. Bielby, Clifford Clogg, Stephen Fienberg, William H. Form, Robert M. Hauser, David L. Kaplan, Ann R. Miller, Mary G. Powers, Donald Rubin, and Donald J. Treiman.
"Alternative Methods For Effecting the Comparability of Occupational Measurement Over Time." Report to the SSRC Advisory and Planning Committee on Social Indicators and the U.S. Bureau of the Census. Subcommittee on Comparability of Occupational Measurement, Social Science Research Council.
- 1980 Bielby, William T. and Richard A. Berk
"Sources of Error in Survey Data Used in Criminal Justice Evaluation." Final Report submitted to National Institute of Law Enforcement and Criminal Justice.
- 1979 Bielby, William T.
"Evaluating Measures of Neighborhood Quality in the Annual Housing Survey." *Annual Housing Survey Studies No. 2*. U.S. Department of Housing and Urban Development. Washington, D.C.: U.S. Government Printing Office, 1979, 33 p.
- 1979 Bielby, William T., Clifford B. Hawley and David Bills
Research Uses of the National Longitudinal Surveys. Research and Development Monograph No. 62, U.S. Department of Labor. Washington, D.C.: U.S. Government Printing Office, 1979, 143p.

SELECTED MEDIA INTERVIEWS AND COVERAGE

- "White Men Can't Help It: Courts Have Been Buying the Idea That They Have Innate Biases," by Michael Orey. *Business Week* (Legal Affairs column), May 15, 2006.
- "Expert Witness: Bill Bielby Helped Launch An Industry - Suing Employers for Unconscious Bias," by Justin Scheck. *The Recorder*, October 28, 2004.
- "The SoCal Professor Was an Early '60s Rocker" (interview by Mike Dugo). *Lance Monthly*, Vol. 4, No. 2, July, 2002, <http://musicdish.com/mag/index.php3?id=6362>.

Interview and commentary, ABC's Prime Time Live, segment on gender discrimination, October 7, 1993.

"Guild's 'Calm' Reaction to Findings Comes as a Surprise to Authors of Writers Report," by Nancy Mills, *Los Angeles Times*, June 24, 1987.

RECENT PAPERS PRESENTED AT PROFESSIONAL MEETINGS (2001 - present):

- 2006 "Title VII Class Actions and the Disaggregation Defense: Bad Law and Bad Statistics." First Annual Conference on Empirical Legal Studies (CELS), University of Texas School of Law, October, 2006 (with Pamela Coukos)
- 2005 "Managerial Discretion, 'Subtle' Bias, and the Politics of Expertise: Litigating Statistical Proof of Employment Discrimination." American Sociological Association, Philadelphia, PA, August, 2005
- 2002 "'I Remember Great Times:' Recreating Community in a Suburban Diaspora." American Sociological Association, Chicago, IL, August, 2002 (with Carl Durnavich and Craig Rawlings).
- 2002 "Insuring Discrimination: Making a Market for Employment Practice Liability Insurance." American Sociological Association, Chicago, IL, August, 2002 (with Michael Bourgeois).

RECENT INVITED LECTURES AND ACTIVITIES (2001-present)

- 2006 "'Statistical Dueling' with Unconventional Weapons: What Courts Should Know About Experts in Employment Discrimination Class Actions." Center for the Study of Law & Society, School of Law, Boalt Hall, University of California, Berkeley (co-sponsored by the Haas School of Business and the Department of Sociology), November 14, 2006 (with Pamela Coukos)
- 2006 "Managerial Discretion, Cognitive Stereotypes, and Workplace Discrimination: Should Organizations be Legally Liable for 'Unconscious' Bias?" Department of Sociology, University of Illinois--Chicago, October 26, 2006.
- 2006 Interview, "From the Plaintiffs' Expert." Annual Conference of the American Employment Law Council, Naples, FL, October, 20, 2006 (interviewed by Neal Mullen of Paul, Hastings, Janofsky & Walker, LLP).
- 2006 "The Law, Equal Opportunity, and Organizational Sociology: Understanding and Addressing Workplace Discrimination in an Era of 'Subtle' Bias -- or -- 'Bringing the Firms Back In.'" Harvard Inequality & Social Policy Seminar, Kennedy School of Government, Harvard University, October 2, 2006.
- 2004-06 "Managerial Discretion, 'Subtle' Bias, and the Politics of Expertise: Litigating Statistical Proof of Employment Discrimination." Columbia University Sociology Colloquium, March 22, 2006; Harvard-MIT Economic Sociology Seminar, MIT Sloan School of Management, October 27, 2005; Colloquium Series, Department of Sociology, University of Illinois, January 30, 2004; Economic Sociology Workshop, Graduate School of Business, University of Chicago, February 3, 2004; Department of Sociology, Northwestern University, February 5, 2004,

Department of Sociology, University of Wisconsin--Madison, March 2, 2004,
Public Policy Seminar, George Washington University, October 20, 2004.
Population Studies Center, University of Pennsylvania, February 14, 2005.

- 2005 Panelist, "Best Practices: Strategies for Retention and Promotion." Promoting Diversity: Tough Questions and Proposed Solutions Conference, Sponsored by the Bar Association of San Francisco, California Minority Counsel Program, and Minority Corporate Counsel Association, San Francisco, October 28, 2005.
- 2005 "Cognitive Bias, Organizational Context, and Intent: Lessons from Applying Social Science Expertise in *Dukes et al. v. Wal-Mart*." Equal Justice Society Conference on Rethinking the Intent Doctrine, Chicago, IL, September 9, 2005.
- 2005 "Managerial Discretion, 'Subtle' Workplace Bias and the Courts." The Ruth and John Useem Plenary Address, 2005 Annual Meeting of the North Central Sociological Association, Pittsburgh, PA, April 9, 2005.
- 2004 "I Remember Great Times: Recreating Community in an On-Line Suburban Diaspora." Plenary Speaker, Sociology Day Program, University of Illinois at Chicago, March 27, 2004.
- 2003 "Controlling Primetime: Organizational Concentration and Network Television Primetime Programming Strategies." Colloquium Series, Department of Sociology, University of Minnesota, September 23, 2002; Brown Bag Series, Department of Sociology, University of Arizona, October 3, 2003.
- 2003 "Insuring Discrimination: Making a Market for Employment Practice Liability Insurance." Colloquium Series, Department of Sociology, University of Minnesota, November 2003; Colloquium Series, Department of Sociology, University of Pennsylvania, December 2003.
- 2003 "Rock in a Hard Place: Grass-Roots Cultural Production in the Post-Elvis Era." Presidential Address, American Sociological Association, Atlanta, GA, August 17, 2003.
- 2003 Panelist, Open Forum on Electronic Publication. American Sociological Association, Atlanta, GA, August, 2003.
- 2003 "Thin Vitae: Bigger and Better." Performance, Grand Ballroom, Atlanta Hilton, American Sociological Association, Atlanta, GA, August 16, 2003 (with Steve Gortmaker, Doreen Lebeau, Craig Rawlings, Paul Cleary, Mickey Silvers, Britta Wheeler, Andrew Merritt, and John Sutton; video documentary by Carl Durnavich, CD by Steve Gortmaker).
- 2003 Presentation, "Controlling Primetime: Organizational Concentration and Network Television Programming Strategies," UCSB Foundation, May 16, 2003.
- 2003 Panelist/Commentator, "Beyond the Glass Ceiling: The Maternal Wall as a Barrier to Gender Equality," Thomas Jefferson School of Law Ruth Bader Ginsburg Lecture Series, San Diego, CA, April 25, 2003 (commenting on lecture by Joan Williams).
- 2003 "Rock in a Hard Place: Home Grown Cultural Production in the Post-Elvis Era." Irene Flecknoe Ross Lecture Series, Department of Sociology, UCLA, April 11,

- 2003; Colloquium Series, Department of Sociology, University of Chicago, May 6, 2003; Colloquium Series, Department of Sociology, Northwestern University, May 24, 2003.
- 2003 "Can I Get a Witness? Presenting and Challenging Expert Testimony on Gender Bias in Employment Discrimination Litigation," Social Psychology of Bias Panelist, American Bar Foundation and Stanford Law School Conference, Rights and Realities: Legal and Scientific Approaches to Employment Discrimination. Stanford Law School, March 24-25, 2003.
- 2002 "Thin Vitae: Blues & 3-Chord Rock 'n Roll." Performance, Grand Ballroom, Chicago Hilton, American Sociological Association, Chicago, IL, August 16, 2002 (with Steve Gortmaker, Doreen Lebeau, Craig Rawlings, Bryan Salvage, Mickey Silvers, and John Sutton; video documentary by Carl Durnavich).
- 2002 Discussant, "Profiling and Ascription in Employment." Thematic Session, American Sociological Association, Chicago, IL, August, 2002.
- 2002 "The Social Psychology of Racial Profiling in Drug Interdiction Stops." Association of Black Sociologists, Chicago, IL, August, 2002.
- 2002 "Organizational Perspectives on Minimizing Workplace Bias," Cognitive Bias Working Group, Program on Gender, Work & Family, College of Law, American University, May 11, 2002.
- 2002 "Expert Testimony on Stereotyping and Cognitive Bias in Employment Litigation," Cognitive Bias Working Group, Program on Gender, Work & Family, College of Law, American University, May 10, 2002.
- 2002 "Social Statistics in Litigation Contexts." Quantitative Methods in the Social Sciences Colloquium, University of California, Santa Barbara, April 18, 2002.
- 2002 "Controlling Prime-Time: Organizational Concentration and Network Television Programming Strategies," Colloquium, Department of Communication, University of California, Santa Barbara, March, 2002.
- 2001 "Disney's America and the World." Organizer and Presider, Thematic Session, American Sociological Association, Anaheim, CA, August, 2001.
- 2001 Professional Workshop: Serving as an Expert Witness. American Sociological Association, Anaheim, CA, August, 2001.
- 2001 Author Meets Critic, Barry Glassner's *The Culture of Fear: Why Americans Are Afraid of the Wrong Things*. Panelist, Pacific Sociological Association, March 2001.
- 2001 "Hollywood Graylist? Access to Employment for Writers." Sociology Day - Perspectives on Aging in the 21st Century, California State University, Fullerton, March 20, 2001.
- 2001 State of California Senate Committee on Government Oversight Hearing, testimony on gender equity in University of California practices for faculty hiring, January 31, 2001.

RESEARCH GRANTS:

- 2004-05 "Doctoral Dissertation Research: Dividing the Field: Credentials, Organizational Dynamics and Sex Segregation in U.S. Higher Education, 1970-2000." National Science Foundation Dissertation Improvement Grant (Craig Rawlings, Ph.D. Candidate, UC Santa Barbara).
- 2002-03 "'Serial Employment': Professional, Managerial, and Technical Workers in the New Economy." University of California Institute for Labor and Employment (with Lisa Torres).
- 1995-98 "Environments, Organizations, and Jobs: The Causes and Consequences of Workplace Gender Segregation." National Science Foundation, Sociology Division and Human Capital Initiative.
- 1995-96 "MOST Program: Minority Opportunity Through School Transformation." American Sociological Association, Ford Foundation, and the Borchard Foundation (Co-Investigator, with Kum-Kum Bhavnani).
- 1989-93 "From Market to Hierarchy: Industrial Change and the Employment Relation in Television Production." National Science Foundation, Sociology Division. (Principal Investigator. Denise D. Bielby, Co-Investigator.)
- 1985-87 "Men's and Women's Commitment to Work and Family." National Science Foundation, Sociology Division. (Principal Investigator. Denise D. Bielby, Co-Investigator.)
- 1987 "Research Conference on Occupational Sex Segregation and Comparable Worth." American Sociological Association, Problems of the Discipline Program (with Toby Parcel, James Baron, Paula England, Jerry Jacobs, Barbara Reskin, and Patricia Roos).
- 1980-83 "Jobs, Firms, and Industries: Economic 'Dualism' and the Organization of Work." National Science Foundation, Divisions of Sociology and Applied Research. (Principal Investigator. James N. Baron, Co-Investigator.)
- 1978-80 "Sources of Error in Survey Data Used in Criminal Justice Evaluation." National Institute of Law Enforcement and Criminal Justice. (Principal Investigator. Richard A. Berk, Co-Investigator.)
- 1978 "Neighborhood and Household Components of Variation in Respondents' Reports of Neighborhood Quality." U. S. Department of Housing and Urban Development. (Principal Investigator.)
- 1977 "Research Uses of the National Longitudinal Survey." U. S. Department of Labor. (Principal Investigator.)

RESEARCH AND TEACHING INTERESTS:

Quantitative Methods
Media & Popular Culture
Social Stratification

Organizations
Labor Markets & Discrimination
Gender & Race

REFERENCES: available upon request

EXHIBIT C

- ULFS Master Index

- Deposition of Jeff Akers
- Deposition of Janice Baker
- Deposition of Vince Biondo
- Deposition of Ralph Earls
- Deposition of Mike Giles
- Deposition of Jim Gullock
- Deposition of Lee Holland
- Deposition of Jimmy Lewis
- Deposition of Oscar Miller
- Deposition of Jim Reeves
- Deposition of Eugene Reynolds

- EEOC's Complaint
- Wal-Mart's Answer to Complaint

- Plaintiff's 1st Propounding of Interrogatories and Request for Production of Documents
- Answers to Plaintiff's 1st Propounding of Interrogatories and Requests for Production of Documents
- Defendant's Supplemental Answers to Plaintiff's 1st Propounding of Interrogatories and Requests for Production of Documents

- Plaintiff's 1st Set of Interrogatories
- Answers to Plaintiff's 1st Propounding of Interrogatories and Requests for Production of Documents

- Plaintiff EEOC's Second Set of Interrogatories to Defendant
- Defendant's Answers to Plaintiff's Second Set of Interrogatories
- Defendant's Supplemental Answers to Plaintiff's Second Set of Interrogatories

- Plaintiff EEOC's Third Set of Interrogatories to Defendant
- Defendant's Answers to EEOC's Third Set of Interrogatories
- Defendant's Supplemental Answers to EEOC's Third Set of Interrogatories

- Plaintiff EEOC's Fourth Set of Interrogatories to Defendant
- Defendant's Answers to EEOC's Fourth Set of Interrogatories

- EEOC's Second Request for Production to Defendant
- Defendant's Responses to EEOC's Second Request for Production

- EEOC's Third Request for Production to Defendant
- Defendant's Responses to EEOC's Third Set of Requests for Production of Documents

Exhibits from Giles Depositions:

- NO. 2 2002 organizational chart for 11

Exhibits from Reeves Depositions:

- NO. 59 Diversity Awareness 85
- NO. 60 Three Basic Beliefs documentation 101
- NO. 61 Fair Employment Practice Divisional (07)
- NO. 62 Discrimination PG-501 Employment 117
- NO. 63 Excerpt from Personnel Policies and Procedures Manual
- NO. 65 Text of radio ad 152
- NO. 66 Text of newspaper ad 153
- NO. 67 Job Order Referral 178
- Exhibit 2 - part of Personnel Policies & Procedures Manual for Distribution
- Exhibits 3 through 7 - Matrix of central job functions
- Exhibit 58 - Avoiding Discrimination in the Workplace
- Exhibit 13 - manual

Exhibits from Reynolds Depositions:

- 20 - Pre-Screening Questionnaire 117
- 21 - 1st Interview Comment Sheet 119
- 22 - Interview Schedule 128
- 23 - Interview Questions 130

Exhibits from Gulock Depositions:

- Exh 8 - orderfilling process, essential matrix, job function
- Exh 1 - hiring hourly associates
- Exh 11 - on interviewing skills
- Exh 12 - workbook for interviewing skills

- Wal Mart Manuals - Hiring Hourly Associates and Associate Transfers
- Wal Mart Associate Handbooks and wage guidelines
- Wal-mart Distribution Center Matrix of Essential Job Functions Orderfilling/Processing Caselot/Breakpack
- Organizational Chart
- Employment Application
- Manuals - Fair Employment Practice; Diversity Awareness training materials; Employee Federal Labor Law Poster
- Logistics University - Personnel Policies and Procedure
- Logistics University - Valuing Diversity
- Video - Avoiding Discrimination in the Work place

- Screening, 1st, 2nd & 3rd Interview Packets;
- Wal-Mart TalentSelection Leader's Guide;
- 2001 TalentSelection Participant Manual;
- 2002 TalentSelection Participant Manual;
- Hiring/Interviewing Memos;
- Screening, 1st, & 2nd Interview Packets;
- Hiring Process Form;
- 2005 year End Hire Report - Jeffrey Akers;
- Hiring Goals Results Memo;
- Screening, EEO Reports;
- Diversity Project Memo;
- Executive Summaries; Monthly Report Memos
- Application Packets for 1998 - 2004